

Level 3 Diploma in Electrical Power Engineering - Power Plant Operations (2339-35)

July 2018 version 1.2



Qualification at a glance

Subject area	Electrical Power Engineering
City & Guilds number	2339
Age group approved	16+
Assessment	Portfolio of evidence
Support materials	Centre handbook
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	GLH	TQT	City & Guilds number	Accreditation number
Level 3 Diploma in Electrical Power Engineering – Power Plant Operations	513	890	2339-35	500/9732/5

Version and date	Change detail	Section
1.2 July 2018	Replaced seven with nine	301 unit Assessment criteria 2.3
1.1 October 2017	Added TQT and GLH details Deleted QCF	Qualification at a Glance, Structure Appendix2



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1 Introduction

This document tells you what you need to do to deliver the qualification:

Area	Description
Who is the qualification for?	It is for learners who work or want to work as Power Plant Operators in the Electrical Power Engineering sector
What does the qualification cover?	It allows learners to learn, develop and practise the skills required for employment and/or career progression in the Electrical Power Engineering sector.
What opportunities for progression are there?	It allows learners to progress into employment or to the following City & Guilds qualifications: <ul style="list-style-type: none"> • Level 3 Diploma in Electrical Power Engineering - Substation Plant: 500/7323/0 • Level 3 Diploma in Electrical Power Engineering - Substation Plant: 500/7323/0 • Level 3 Diploma in Electrical Power Engineering - Underground Cables: 500/7324/2 • Level 3 Diploma in Electrical Power Engineering - Overhead Lines: 500/7318/7

Structure

To achieve the **Level 3 Diploma in Electrical Power Engineering – Power Plant Operations**, learners must achieve **89** credits overall. **51** credits from the mandatory units, a minimum of **6** credits from optional group A and a minimum of **32** credits from optional group B.

Unit accreditation number	City & Guilds unit number	Unit title	Credit value
Mandatory			
A/601/5013	Unit 301	Complying with statutory regulations and organisational safety requirements	5
T/600/5595	Unit 305	Work with other people	6
T/600/6083	Unit 356	Start up and shut down an electricity generation unit	20

M/600/6115	Unit 357	Evaluate and solve problems associated with an electricity generation unit	20
Optional group A			
L/600/6140	Unit 319	Lead the work of teams and individuals to achieve work objectives	6
A/600/5663	Unit 320	Develop yourself in the work role	6
Optional group B			
F/600/5700	Unit 318	Authorise actions on plant and apparatus in electricity power utilities environment	6
D/600/5963	Unit 353	Isolate and de-isolate an electricity generation system	14
T/600/6049	Unit 354	Routine testing of an electricity generating system	12
A/600/6117	Unit 358	Coordinate a response to a unit contingency	20
J/600/6119	Unit 359	Handover responsibility for the operation of an electricity generation unit	20

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

Title and level	GLH	TQT
City & Guilds Level 3 Diploma in Electrical Power Engineering - Power Plant Maintenance	513	890



2 Centre requirements

Approval

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualification before designing a course programme.

Resource requirements

Any centre wishing to deliver these qualifications must have access to the appropriate plant, apparatus and equipment that will enable candidates to obtain the required evidence to achieve the unit and /or diploma. For this reason it is likely that centres will be either specialist providers or partnered with power sector companies.

On their approval visit the qualifications consultant confirm that centres have the required physical resources with which to deliver the diplomas.

Centre staffing

In line with the sector skills council Energy & Utility's assessment strategy, all **assessors, internal quality assurers** and **qualifications consultants** involved in the delivery of Power sector qualifications must:

- Demonstrate a high level of interpersonal and communication skills, comparable with at least the Key Skills and Core Skills (Communication) identified within "Develop productive working relationships with colleagues" (MSC D1)
- Have up-to-date knowledge of current practice and emerging issues within their industry and be aware there may be differences between the four UK countries
- Have a thorough understanding of the National Occupational Standards / assessment units for the qualifications they are assessing or verifying and be able to interpret them and offer advice on assessment-related matters
- Show experience and working knowledge of the assessment and verification processes relating to the context in which they are working
- Demonstrate they have relevant and credible technical and/or industrial experience not more than 5 years old - at a level relevant to their role and the award
- Show they are able to act as an emissary of the awarding body and be able to facilitate consistency across centres
- Centre staff should hold, or be working towards, the relevant Assessor/Internal Quality Assurer TAQA qualification for their role in delivering, assessing and verifying this qualification, or meet the relevant experience requirements outlined above.

- Demonstrate a commitment to continuing professional development and to keeping abreast of the changing environment and practices in their industry
- Demonstrate they have relevant and credible technical and/or industrial experience within the industry appropriate to these contexts – overhead, underground or substation.

Centre staff may undertake more than one role, eg tutor and assessor or internal quality assurer, but cannot internally verify their own assessments.

Continuing professional development (CPD)

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

Candidate entry requirements

City & Guilds does not set entry requirements for this qualification. However, centres must ensure that candidates have the potential and opportunity to gain the qualification successfully.

Age restrictions

City & Guilds cannot accept any registrations for candidates under 16 as this qualification is not approved for under 16s.



3 Delivering the qualification

Initial assessment and induction

An initial assessment of each learner should be made before the start of their programme to identify:

- if the learner has any specific training needs,
- support and guidance they may need when working towards their qualification.
- any units they have already completed, or credit they have accumulated which is relevant to the qualification.
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the learner fully understands the requirements of the qualification, their responsibilities as a learner, and the responsibilities of the centre. This information can be recorded on a learning contract.

Recording documents

Candidates and centres may decide to use a paper-based or electronic method of recording evidence.

City & Guilds endorses several ePortfolio systems, including our own, **Learning Assistant**, an easy-to-use and secure online tool to support and evidence learners' progress towards achieving qualifications. Further details are available at: www.cityandguilds.com/eportfolios.

City & Guilds has developed a set of *Recording forms* including examples of completed forms, for new and existing centres to use as appropriate. *Recording forms* are available on the City & Guilds website.

Although new centres are expected to use these forms, centres may devise or customise alternative forms, which must be approved for use by the qualification consultant, before they are used by candidates and assessors at the centre. Amendable (MS Word) versions of the forms are available on the City & Guilds website.



4 Assessment

Candidates must:

- have a completed portfolio of evidence for each unit

Recognition of prior learning (RPL)

Recognition of prior learning means using a person's previous experience or qualifications which have already been achieved to contribute to a new qualification.

RPL is allowed and is not sector specific.



5 Units

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- guided learning hours
- unit aim
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria

Unit 301

Complying with statutory regulations and organisational safety requirements

UAN:	A/601/5013
Level:	2
Credit value:	5
GLH:	35
Aim:	This unit covers the skills and knowledge needed to prove the competences required to deal with statutory regulations and organisational safety requirements. It does not deal with specific safety regulations or detailed requirements, it does, however, cover the more general health and safety requirements that apply to working in an industrial environment.

Learning outcome
The learner will: 1. comply with statutory regulations and organisational safety requirements
Assessment criteria
The learner can: 1.1 comply with their duties and obligations as defined in the Health and Safety at Work Act 1.2 demonstrate their understanding of their duties and obligations to health and safety by: <ul style="list-style-type: none">• applying in principle their duties and responsibilities as an individual under the Health and Safety at Work Act• identifying, within their organisation, appropriate sources of information and guidance on health and safety issues, such as:<ul style="list-style-type: none">○ eye protection and personal protective equipment (PPE)○ COSHH regulations○ Risk assessments• identifying the warning signs and labels of the main groups of hazardous or dangerous substances• complying with the appropriate statutory regulations at all times 1.3 present themselves in the workplace suitably prepared for the activities to be undertaken 1.4 follow organisational accident and emergency procedures 1.5 comply with emergency requirements, to include:

- identifying the appropriate qualified first aiders and the location of first aid facilities
 - identifying the procedures to be followed in the event of injury to themselves or others
 - following organisational procedures in the event of fire and the evacuation of premises
 - identifying the procedures to be followed in the event of dangerous occurrences or hazardous malfunctions of equipment
- 1.6 recognise and control hazards in the workplace
- 1.7 identify the hazards and risks that are associated with the following:
- their working environment
 - the equipment that they use
 - materials and substances (where appropriate) that they use
 - working practices that do not follow laid-down procedures
- 1.8 use correct manual lifting and carrying techniques
- 1.9 demonstrate one of the following methods of manual lifting and carrying:
- lifting alone
 - with assistance of others
 - with mechanical assistance
- 1.10 apply safe working practices and procedures to include:
- maintaining a tidy workplace, with exits and gangways free from obstruction
 - using equipment safely and only for the purpose intended
 - observing organisational safety rules, signs and hazard warnings
 - taking measures to protect others from any harm resulting from the work that they are carrying out

Learning outcome

The learner will:

2. know how to comply with statutory regulations and organisational safety requirements

Assessment criteria

The learner can:

- 2.1 describe the roles and responsibilities of themselves and others under the Health and Safety at Work Act, and other current legislation (such as The Management of Health and Safety at Work Regulations, Workplace Health and Safety and Welfare Regulations, Personal Protective Equipment at Work Regulations, Manual Handling Operations Regulations, Provision and Use of Work Equipment Regulations, Display Screen at Work Regulations, Reporting of Injuries, Diseases and Dangerous Occurrences Regulations)
- 2.2 describe the specific regulations and safe working practices and procedures that apply to their work activities
- 2.3 describe the warning signs for the nine main groups of hazardous substances defined by Classification, Packaging and Labelling of Dangerous Substances Regulations

- 2.4 explain how to locate relevant health and safety information for their tasks, and the sources of expert assistance when help is needed
- 2.5 explain what constitutes a hazard in the workplace (such as moving parts of machinery, electricity, slippery and uneven surfaces, poorly placed equipment, dust and fumes, handling and transporting, contaminants and irritants, material ejection, fire, working at height, environment, pressure/stored energy systems, volatile, flammable or toxic materials, unshielded processes, working in confined spaces)
- 2.6 describe their responsibilities for identifying and dealing with hazards and reducing risks in the workplace
- 2.7 describe the risks associated with their working environment (such as the tools, materials and equipment that they use, spillages of oil, chemicals and other substances, not reporting accidental breakages of tools or equipment and not following laid-down working practices and procedures)
- 2.8 describe the processes and procedures that are used to identify and rate the level of risk (such as safety inspections, the use of hazard checklists, carrying out risk assessments, COSHH assessments)
- 2.9 describe the first aid facilities that exist within their work area and within the organisation in general; the procedures to be followed in the case of accidents involving injury
- 2.10 explain what constitute dangerous occurrences and hazardous malfunctions, and why these must be reported even if no-one is injured
- 2.11 describe the procedures for sounding the emergency alarms, evacuation procedures and escape routes to be used, and the need to report their presence at the appropriate assembly point
- 2.12 describe the organisational policy with regard to fire fighting procedures; the common causes of fire and what they can do to help prevent them
- 2.13 describe the protective clothing and equipment that is available for their areas of activity
- 2.14 explain how to safely lift and carry loads, and the manual and mechanical aids available
- 2.15 explain how to prepare and maintain safe working areas; the standards and procedures to ensure good housekeeping
- 2.16 describe the importance of safe storage of tools, equipment, materials and products
- 2.17 describe the extent of their own authority, and to whom they should report in the event of problems that they cannot resolve.

Unit 301 Complying with statutory regulations and organisational safety requirements

Supporting information

Guidance

The learner will be expected to comply with all relevant regulations that apply to their area of work, as well as their general responsibilities as defined in the Health and Safety at Work Act. The learner will need to be able to identify the relevant qualified first aiders and know the location of the first aid facilities.

The learner will have a knowledge and understanding of the procedures to be adopted in the case of accidents involving injury and in situations where there are dangerous occurrences or hazardous malfunctions of equipment, processes or machinery. The learner will also need to be fully conversant with their organisation's procedures for fire alerts and the evacuation of premises.

The learner will also be required to identify the hazards and risks that are associated with their job. Typically, these will focus on their working environment, the tools and equipment that they use, the materials and substances that they use, any working practices that do not follow laid-down procedures, and manual lifting and carrying techniques.

Unit 305

Work with other people

UAN:	T/600/5595
Level:	2
Credit value:	6
GLH:	36
Aim:	This unit is about making an effective individual contribution to the work of a team or group. It involves taking an active role and where necessary a lead role in providing colleagues with guidance and advice when planning and completing work activities. It also involves using and communicating data and information and resolving problems.

Learning outcome
The learner will: 1. be able to perform work with others
Assessment criteria
The learner can: 1.1 play an active role in determining and agreeing the tasks you and others need to undertake complete the work activity 1.2 agree what each of you will do and what work methods need to be used to complete tasks before starting the job in accordance with work instructions 1.3 finish the tasks you have been given on schedule and to the required quality standards and in a way that does not interfere with the work being undertaken by others 1.4 share ideas and experiences with colleagues on how improvements can be made to the way work is undertaken and to the quality of the finished product 1.5 collaborate and cooperate with others to find effective ways to deal with work problems 1.6 monitor the status and progress of others' work to establish if and where it interferes with and negatively impacts on your own 1.7 follow procedures and precautions to safeguard personnel, plant and the environment in accordance with health and safety regulations, environmental legislation and company procedures 1.8 conduct a risk assessment in accordance with health and safety and environmental legislation.

Learning outcome
The learner will: 2. be able to take a lead role in joint activities

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Assessment criteria
The learner can:
2.1 develop and communication of the work plan
2.2 make sure the work plan specifies the resources required, the objectives to be met, the allocation of responsibilities and the timescale for each aspect of the work
2.3 use and follow the work plan to monitor the progress of the work being undertaken
2.4 follow procedures and precautions designed to safeguard personnel, plant and the environment in accordance with health and safety regulations, environmental legislation and company procedures.

Learning outcome
The learner will:
3. be able to use and communicate data and information

Assessment criteria
The learner can:
3.1 communicate ideas and information in a clear and concise way
3.2 seek feedback to make sure that ideas, data and information have been communicated and understood by others
3.3 make sure that everyone contributing to the work activity complies with work instructions and quality assurance standards and requirements
3.4 inform the team of the work plan and the work activities they are personally responsible for completing
3.5 communicate the status and progress of the work being undertaken in accordance with company reporting systems and procedures.

Learning outcome
The learner will:
4. be able to resolve problems effectively and efficiently

Assessment criteria
The learner can:
4.1 report problems outside the limits of personal responsibility to designated personnel
4.2 resolve problems with working relationships
4.3 refer problems with working relationships that cannot be resolve by yourself to appropriate personnel.

Learning outcome
The learner will:
5. know and understand how to use general knowledge about working with others

Assessment criteria
The learner can:
5.1 state the main principles of health and safety and environmental legislation and regulations

- | |
|--|
| 5.2 state the company reporting lines and authorisation roles and responsibilities |
| 5.3 state the company policies and procedures that directly impact on the work to be undertaken. |

Learning outcome

The learner will:

- | |
|---|
| 6. know and understand how to use industry and context specific knowledge about working with others |
|---|

Assessment criteria

The learner can:

- | |
|--|
| 6.1 demonstrate how to read and interpret procedures and information sources to make sure that tools and equipment are fit for purpose and safe to use |
| 6.2 identify what personal protective equipment needs to worn when undertaken work activities |
| 6.3 identify what materials and substances are dangerous and hazardous to health |
| 6.4 explain how to maintain safe working and environmental practices throughout the duration of the work |
| 6.5 explain how to minimise risks to self and others when undertaking work activities |
| 6.6 state company work instruction, information and reporting systems and documentation |
| 6.7 explain how to respond to the different types and categories of emergency situations that might occur |
| 6.8 describe how to devise deliverable work plans that reflect the skills and competencies of the individual and the work team |
| 6.9 discuss planning methods and techniques. |
| 6.10 describe problem solving tools and techniques |
| 6.11 describe how to recognise and report incorrect and inaccurate work instructions and supporting documentation in accordance with company. |

Unit 305 Work with other people

Supporting information

Scope and range

The learner needs to provide evidence to show that they have worked with other people under all the following situations:

1. Working with one other person.
2. Working as a member of a team.
3. Taking a lead role in joint activities.

Unit 318

Authorise actions on plant and apparatus in electricity power utilities environment

UAN:	F/600/5700
Level:	3
Credit value:	6
GLH:	36
Aim:	This unit is about the issuing of "authorisations for work" in the electricity power utilities environment. It involves specifying safety precautions, working methods and resources to ensure that the way in which work is done is in accordance with health and safety regulations and procedures set by the organisation.

Learning outcome
The learner will: 1. be able to plan and prepare for work activities
Assessment criteria
The learner can: 1.1 determine work location using company documentation and information sources 1.2 conduct a site specific risk assessment following company policy and in line with Health and Safety Regulations 1.3 determine the methods to be used to reduce risks 1.4 identify the resources and activities that are needed to implement risk reduction 1.5 inform parties directly and indirectly responsible for completing risk reduction activities, of the location and controls to be used.

Learning outcome
The learner will: 2. be able to issue authorisations
Assessment criteria
The learner can: 2.1 specify the procedures for implementing the risk reduction methods and the controls to be used 2.2 ensure that the risk reduction methods and procedures comply with all relevant regulations and guidelines 2.3 issue authorisations in line with specified procedures 2.4 ensure that the person receiving the authorisation has understood the requirements 2.5 select and wear required personal protective equipment when completing work activities in accordance with Health and Safety Regulations.

Learning outcome
The learner will: 3. be able to cancel, transfer and suspend authorisations
Assessment criteria
The learner can: 3.1 check the status before cancelling, transferring or suspending an authorisation 3.2 cancel, transfer or suspend authorisation in line with specified procedures 3.3 ensure that everyone involved in the action is made aware that the authorisation has been cancelled, transferred or suspended.

Learning outcome
The learner will: 4. be able to restore and reinstate work location
Assessment criteria
The learner can: 4.1 store barriers, notices and any forms of work area demarcation and equipment on completion of work activity in accordance with company procedure 4.2 dispose of waste materials and hazardous substances in accordance with Health and Safety and Environmental Regulations and Legislation 4.3 leave the work area in a condition that is in line with Health and Safety Regulations and in accordance with company policy, procedures and good housekeeping practice.

Learning outcome
The learner will: 5. be able to use and communicate data and information
Assessment criteria

<p>The learner can:</p> <ul style="list-style-type: none"> 5.1 communicate authorisation requirements and the responsibilities of the individuals to the appropriate people 5.2 make sure that authorisation records are accurate, up to date, complete and stored correctly 5.3 report unavailable or defective barriers, notices or demarcation equipment and resources in accordance with company procedures 5.4 read and interpret company work instructions and documentation used to complete the work activity 5.5 maintain documentation and report the status of authorisations in accordance with company policy and procedures.

<p>Learning outcome</p>
<p>The learner will:</p> <ul style="list-style-type: none"> 6. be able to resolve problems effectively and efficiently
<p>Assessment criteria</p>
<p>The learner can:</p> <ul style="list-style-type: none"> 6.1 deal with problems within the limits of own job role responsibility 6.2 report problems outside job role responsibility to designated personnel.

<p>Learning outcome</p>
<p>The learner will:</p> <ul style="list-style-type: none"> 7. be able to demonstrate general knowledge and understanding about authorising plant and apparatus in an electricity power utilities environment
<p>Assessment criteria</p>
<p>The learner can:</p> <ul style="list-style-type: none"> 7.1 state the main principles of Health and Safety and Environmental Legislation and Regulations 7.2 state the company reporting lines and authorisation roles and responsibilities 7.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome
<p>The learner will:</p> <p>8. be able to demonstrate specific knowledge and understanding about authorising plant and apparatus in an electricity power utilities environment</p>
Assessment criteria
<p>The learner can:</p> <p>8.1 explain general and discipline specific engineering principles and processes</p> <p>8.2 explain what materials and substances are dangerous and hazardous to health</p> <p>8.3 demonstrate how to maintain safe working and environmental practices throughout the duration of the work</p> <p>8.4 explain how to minimise risks to self and others when undertaking work activities</p> <p>8.5 state company work instruction, information and reporting systems and documentation</p> <p>8.6 explain how to respond to the different types and categories of emergency situations that might occur</p> <p>8.7 demonstrate how to install cables and apparatus following engineering principles, processes and procedures</p> <p>8.8 recognise and report inaccurate and incorrect work instructions and documentation.</p>

Unit 318 Authorise actions on plant and apparatus in electricity power utilities environment

Supporting information

Guidance

Scope and range: You need to provide evidence to show that you have carried out all of the following actions on **at least two occasions**:

1. Issued authorisations for work.
2. Cancelled authorisations for work.
3. Transferred authorisations for work
4. Suspended authorisations for work.

Unit 319

Lead the work of teams and individuals to achieve work objectives

UAN:	L/600/6140
Level:	3
Credit value:	6
GLH:	36
Aim:	This unit is about leading and improving the effectiveness of team and individual work plans and providing opportunities for individuals to input and contribute to their own personal development. It involves devising work plans and providing individuals with feedback on their performance.

Learning outcome
The learner will: 1. be able to lead the work planning for teams and individuals
Assessment criteria
The learner can: 1.1 provide team members with the opportunity of contributing to the organisation and planning of their work 1.2 devise realistic and achievable work plans 1.3 make sure that your work plans are consistent with the team's overall objectives 1.4 develop achievable work plans that reflect the skills and competencies of the individual team member and the team as a whole.

Learning outcome
The learner will: 2. be able to assess and improve the performance of work of teams and individuals
Assessment criteria
The learner can: 2.1 secure a venue for an assessment that allows confidential discussions to take place between the team member and self 2.2 provides individual team members with the opportunity to contribute to the assessment of their own work and to have input into their future development 2.3 assess the performance of the team and individual team members based on their roles and responsibilities 2.4 assesses the performance of the team and its individual members against the quality of work they produce and their overall productivity.

Learning outcome
The learner will: 3. be able to provide feedback to team and individuals
Assessment criteria
The learner can: 3.1 provide feedback to team members and individuals in a situation, form and manner most likely to maintain and improve performance 3.2 make sure feedback is clear and is based on an objective assessment of performance 3.3 make sure feedback recognises achievements and provides constructive suggestions and encouragement 3.4 give the team and individuals the opportunity to respond to feedback and recommend how they could improve performance.

Learning outcome
The learner will: 4. be able to use and communicate data and information
Assessment criteria
The learner can: 4.1 communicates work plans to team members in a clear, concise and complete manner 4.2 makes sure the team members understand their individual and team roles and responsibilities for achieving the work plan 4.3 updates individual team members of changes to the work plan and to their individual responsibilities 4.4 communicates the purpose of the assessment, the benefits it provides to the individual, the team and company and the responsibilities of those involved in the assessment process 4.5 provide the team and individual team members with feedback on their performance.

Learning outcome
The learner will: 5. be able to demonstrate general knowledge and understanding about leading the work of teams and individuals
Assessment criteria
The learner can: 5.1 state the main principles of Health and Safety and Environmental Legislation and Regulations 5.2 state the company reporting lines and authorisation roles and responsibilities 5.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome
The learner will: 6. be able to demonstrate specific knowledge and understanding about leading the work of teams and individuals
Assessment criteria
The learner can: 6.1 explain how to read and interpret procedures and information sources to make sure that tools and equipment are fit for purpose and safe to use 6.2 identify what personal protective equipment needs to be worn when undertaking work activities 6.3 explain what materials and substances are dangerous and hazardous to health 6.4 demonstrate how to maintain safe working and environmental practices throughout the duration of the work 6.5 explain how to minimise risks to self and others when undertaking work activities 6.6 state company work instruction, information and reporting systems and documentation 6.7 explain how to respond to the different types and categories of emergency situations that might occur 6.8 explain how to measure and provide feedback to individuals and teams on their performance against work plans 6.9 explain how to provide individuals with opportunities to input into and improve their personal performance 6.10 explain how to devise deliverable work plans that reflect the skills and competencies of the individual and work team.

Unit 319 Lead the work of teams and individuals to achieve work objectives

Supporting information

Guidance

Scope and range: You need to provide evidence to show that you have:

1. Developed a short term plan for an individual team member or a team.
2. Developed a medium term plan for an individual team member or a team
3. Assessed the work of two individuals or teams.
4. Given both positive and negative feedback.
5. Given both verbal and written feedback.
6. Given feedback in at least two of the following types of situation:
 - a) during normal day to day activities
 - b) when required to maintain motivation, morale and effectiveness
 - c) during formal appraisals
 - d) at team meetings and briefings
 - e) during confidential discussions of work

Unit 320

Develop yourself in the work role

UAN:	A/600/5663
Level:	3
Credit value:	6
GLH:	36
Aim:	This unit is about playing an active role in reviewing and setting objectives to improve upon and maintain your personal performance. It involves the use of self assessment methods to establish and agree, with line management, how to achieve your development objectives.

Learning outcome
The learner will: 1. be able to develop yourself in the work roles
Assessment criteria
The learner can: 1.1 assess your current levels of competence and establish where areas of personal development are needed 1.2 agree, with input of your supervisor, the period of time and resources you need to achieve the personal development objectives 1.3 devise and agree a personal development plan, including deadlines, with the support of your supervisor 1.4 implement, with the support of your supervisor, your personal development plan 1.5 review progress against meeting the objectives of your personal development plan and decide on future development actions 1.6 actively seek feedback and advice from your supervisor and work colleagues on how you can maintain and improve your level of performance.

Learning outcome
The learner will: 2. be able to demonstrate general knowledge and understanding about developing yourself in the work role
Assessment criteria
The learner can: 2.1 state the main principles of Health and Safety and Environmental Legislation and Regulations 2.2 state the company reporting lines and authorisation roles and responsibilities 2.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome
The learner will: 3. be able to demonstrate specific knowledge and understanding about developing yourself in the work role
Assessment criteria
The learner can: 3.1 understand where to find training and development opportunities to support personal development plans and objectives 3.2 describe self assessment processes and techniques 3.3 know how to build personal development plans 3.4 know how to write personal development objectives.

Unit 320 Develop yourself in the work role

Supporting information

Guidance

Scope and range: You need to provide evidence to show that you have:

1. Played an active role in reviewing and developing yourself in the work role, whilst demonstrating that you understand the techniques and processes involved.
2. Actively sought feedback and guidance from sources such as: line management, personnel or training specialists, colleagues in your work team.
3. Participated in work role development activities by providing records of: courses, competence assessment, personal development plans, certificates.

Unit 353

Isolate and de-isolate an electricity generation system

UAN:	D/600/5963
Level:	2
Credit value:	14
GLH:	70
Aim:	This unit is about the isolation and de-isolation of a plant system or part of a system. It involves following schedules and procedures, using and communicating data and information and resolving problems.

Learning outcome
The learner will: 1. be able to isolate a system
Assessment criteria
The learner can: 1.1 determine with authorised personnel the extent of the isolation work activity to be undertaken 1.2 make sure that plant and apparatus has been released from service 1.3 seek clarification from designated personnel regarding abnormal or unusual isolation requirements 1.4 apply isolation points to guard against system hazards and inherent dangers 1.5 discharge and release energy and substances stored in components and systems 1.6 carry out the correct tests to check and confirm that the applied isolations are adequate 1.7 take prompt and appropriate action to preserve safety from system hazards and inherent dangers in the event of a contingency.

Learning outcome
The learner will: 2. be able to de-isolate a system
Assessment criteria
The learner can: 2.1 before starting the process get confirmation from a authorised person that the system is ready to de-isolate 2.2 inspect the plant to be de-isolated

- 2.3 make an assessment of whether de-isolation can go ahead, given the environmental conditions and state of the plant
- 2.4 complete the de-isolation on schedule
- 2.5 return isolation devices to the correct storage location after removal
- 2.6 take prompt and appropriate action to preserve safety from system hazards and inherent dangers in the event of a contingency.

Learning outcome

The learner will:

- 3. be able to use and communicate data and information

Assessment criteria

The learner can:

- 3.1 report problems experienced when carrying out intended isolation or de-isolation of system
- 3.2 communicate the state of the plant following the isolation or de-isolation clearly and effectively
- 3.3 accurately record the applied isolation and de-isolation.

Learning outcome

The learner will:

- 4. be able to resolve problems effectively and efficiently

Assessment criteria

The learner can:

- 4.1 follow procedures and precautions designed to safeguard personnel, plant and the environment
- 4.2 take action to prevent and protect the operation of the system in accordance with unit operating procedures and parameters
- 4.3 report problems outside the limits of personal responsibility to designated personnel.

Learning outcome

The learner will:

- 5. know and understand how to use general knowledge about isolating and de-isolating electricity generation systems

Assessment criteria

The learner can:

- 5.1 state the main principles of health and safety and environmental legislation and regulations
- 5.2 state the company reporting lines and authorisation roles and responsibilities
- 5.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome

The learner will:

6. know and understand how to use industry and context specific knowledge about isolating and de-isolating electricity generation systems

Assessment criteria

The learner can:

- 6.1 confirm who is authorised to issue isolation requirements
- 6.2 state in what ways could plant configuration not be compatible with an intended isolation
- 6.3 confirm how to read and follow instructions
- 6.4 identify what the different methods are of electrical and mechanical isolations
- 6.5 state why it is important to report any problems promptly
- 6.6 explain why stored energy and fluids must be discharged safely
- 6.7 state why testing is carried out to confirm an isolation
- 6.8 confirm what information on isolation status needs to be communicated and to whom
- 6.9 explain what sorts of contingencies can arise and how to deal with them safely
- 6.10 state why it is important to follow safety precautions and procedures
- 6.11 describe operational principles of plant, apparatus and associated equipment in the system
- 6.12 state limits of responsibility of individuals and others for dealing with problems
- 6.13 explain how to use and interpret technical data
- 6.14 state isolation methods and their uses
- 6.15 explain why it is important to get clearance to carry out de-isolation and who is authorised to give that
- 6.16 explain what you should look for when inspecting plant to be de-isolated
- 6.17 confirm what factors in the environment or in the state of the plant would indicate that de-isolation could not be carried out safely
- 6.18 state what sort of difficulties can arise with a de-isolation
- 6.19 state why you should report difficulties and to whom
- 6.20 identify where isolation devices are kept and what procedures to follow to record their return.

Unit 353 Isolate and de-isolate an electricity generation system

Supporting information

Scope and range

The learner needs to provide evidence to show that they have isolated and de-isolated two different systems or significant parts of systems:

1. Isolated two systems or significant parts of systems.
2. De-isolated two systems or significant parts of systems.
3. Applied both mechanical and electrical isolations.
4. Removed both mechanical and electrical isolations

Unit 354

Routine testing of an electricity generating system

UAN:	T/600/6049
Level:	2
Credit value:	12
GLH:	60
Aim:	This unit is about preparing for and carrying out routine testing on generating systems, plant and equipment. It also involves using and communicating data and information and resolving problems.

Learning outcome
The learner will: 1. be able to prepare to conduct routine tests on a system
Assessment criteria
The learner can: 1.1 obtain and follow unit procedures for conducting routine tests 1.2 select and check that the testing equipment is fit for purpose in accordance with work instructions 1.3 obtain and follow unit procedures for conducting routine tests.

Learning outcome
The learner will: 2. be able to conduct routine tests on a system
Assessment criteria
The learner can: 2.1 carry out tests in accordance with work instructions 2.2 carry out tests in specified sequence in accordance with work instructions 2.3 report test result that are outside normal operating parameters 2.4 safeguard the health and safety of unit personnel in accordance with health and safety rules and regulations 2.5 complete routine testing activities on schedule.

Learning outcome
The learner will: 3. be able to use and communicate data and information
Assessment criteria
The learner can: 3.1 report unacceptable test results to designated personnel 3.2 report when the system is returned to its specified state in accordance with the units operation requirements 3.3 advise designated and authorised personnel when routine testing is complete 3.4 maintain and update records of system operation in accordance with work schedule.

Learning outcome
The learner will: 4. be able to resolve problems effectively and efficiently
Assessment criteria
The learner can: 4.1 deal with problems within the limits of own job role responsibility 4.2 report problems outside the limits of your responsibility to designated personnel.

Learning outcome
The learner will: 5. know and understand how to use general knowledge about routine testing of electricity generation systems
Assessment criteria
The learner can: 5.1 state the main principles of health and safety and environmental legislation and regulations 5.2 state the company reporting lines and authorisation roles and responsibilities 5.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome
The learner will: 6. know and understand how to use industry and context specific knowledge about routine testing of electricity generation systems
Assessment criteria
The learner can: 6.1 identify what personal protective equipment needs to worn when undertaken work activities 6.2 explain how to minimise risks to self and others when undertaking work activities 6.3 state company work instruction, information and reporting systems and documentation

- 6.4 explain how to respond to the different types and categories of emergency situations that might occur
- 6.5 state what the significance is of parameter indicators
- 6.6 describe what sorts of difficulties you could meet which need to be reported to an appropriate person
- 6.7 explain how to recognise and respond to contingencies
- 6.8 state why it is important to observe safety precautions and follow safe procedures at all times
- 6.9 identify what sources of technical information on system data, limits and constraints to use when testing
- 6.10 explain why you need to tell the person in charge when there is a problem with the system.
- 6.11 describe what types of defects and abnormalities can arise and what kinds of test results do they produce
- 6.12 explain the layout of plant, apparatus and associated equipment, including the location and significance of plant parameter indications
- 6.13 explain why it is important to follow safety precautions and procedures designed to maintain safety when testing systems
- 6.14 state what the system condition needs to be before routine testing can commence.
- 6.15 state what operational information is recorded
- 6.16 state what sources of technical information on system data, limits and constraints to use when conducting routine testing work.

Unit 354 Routine testing of an electricity generating system

Supporting information

Scope and range

The learner needs to provide evidence to show that they have carried out routine testing on two different systems:

1. Carry out routine testing of two systems.
2. On one occasion when unit/system is on line
3. On one occasion when unit/system is off line.

Unit 356

Start up and shut down an electricity generation unit

UAN:	T/600/6083
Level:	3
Credit value:	20
GLH:	120
Aim:	This unit is about the starting up and shutting down of an electricity generation unit. It involves coordinating the actions of others responsible for operating systems within the generation unit. It also involves having an understanding of the layout and operational principles of a generation unit and using and communicating data and information and resolving problems.

Learning outcome
The learner will: 1. be able to plan for start up and shut down operations
Assessment criteria
The learner can: 1.1 determine operating constraints and the context in which they apply 1.2 prioritise system operations to meet the operating context and constraints that apply 1.3 follow procedural requirements in planning the sequence and timing of operations 1.4 determine and communicate the state of individual systems within the unit 1.5 communicate plans with others involved in the system start up and shut down process 1.6 determine a safe and cost effective sequence of actions to be followed 1.7 determine the resources that will be needed to achieve the required results and ensure they are available 1.8 follow procedures and take precautions to safeguard personnel, plant and the environment 1.9 plan and carry out all activities in accordance with company policies and procedures.

Learning outcome
The learner will:

City & Guilds Level 3 Diploma in Electrical Power Engineering - Power Plant Operations (2339-35) Electrical Power Engineering – Power Plant Operations (2339-35)

2. be able to control start up and shut down operations

Assessment criteria

The learner can:

- 2.1 carry out the sequence of actions needed in accordance with planned priorities
- 2.2 meet and comply with procedural requirements relating to the context
- 2.3 make sure that individual systems are in the required state before you initiate any control actions
- 2.4 meet and comply with procedural requirements relating to the context
- 2.5 give direction to those responsible for start up and shut down actions
- 2.6 use information on the condition of the unit systems to inform the decisions you take
- 2.7 maintain individual system parameters within safe limits throughout
- 2.8 deal with operational problems by taking actions which minimise risk and deterioration in system performance
- 2.9 take prompt action to preserve safety in the event of contingency in accordance with health and safety rules and regulations.

Learning outcome

The learner will:

3. be able to use and communicate data and information

Assessment criteria

The learner can:

- 3.1 record and report operational difficulties outside the limits of your personal responsibilities
- 3.2 communicate the status of operations to those involved in the process
- 3.3 maintain accurate and up to date records in accordance with company reporting systems and documentation.

Learning outcome

The learner will:

4. be able to resolve problems effectively and efficiently

Assessment criteria

The learner can:

- 4.1 deal with problems within the limits of own job role responsibility
- 4.2 report problems outside job role responsibility to designated personnel.

Learning outcome
The learner will: 5. know and understand how to use general knowledge about start up and shut down of electricity generation systems
Assessment criteria
The learner can: 5.1 state the main principles of health and safety and environmental legislation and regulations 5.2 state the company reporting lines and authorisation roles and responsibilities 5.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome
The learner will: 6. know and understand how to use industry and context specific knowledge about start up and shut down of electricity generation systems
Assessment criteria
The learner can: 6.1 state what procedures you have to comply with to do your job 6.2 explain the operating context and constraints which apply 6.3 confirm what system parameters exist and how to maintain them 6.4 explain why it is important to confirm the state of the systems 6.5 describe what sorts of operational difficulties you may encounter and how to deal with them 6.6 explain what human and material resources are needed when starting up and shutting down a system 6.7 explain operational principles of plant, apparatus and associated equipment in the system 6.8 explain what effective communication is 6.9 explain what parameters exist for individual systems and the unit 6.10 explain health, safety and environmental safety practices in relation to electricity generation in an industrial environment 6.11 explain how to use and interpret technical data 6.12 confirm how to maintain plant parameters 6.13 explain what sorts of contingencies can arise and how to deal with them 6.14 state what records need to be kept 6.15 explain what procedural requirements exist in relation to the operating context 6.16 explain why the sequence and timing of actions is important 6.17 describe what sorts of operational difficulties you may encounter and how to deal with them, including which sorts need to be reported to an appropriate authority 6.18 confirm what monitoring information to collect 6.19 confirm who to report specific operational difficulties to 6.20 explain when an emergency shut down is necessary and how to do it

- 6.21 explain why it is important to observe safety precautions and follow safe procedures at all time
- 6.22 explain why it is important to communicate concisely and accurately.

Unit 356 Start up and shut down an electricity generation unit

Supporting information

Scope and range

The learner needs to provide evidence to show that they have planned and controlled the start up and shut down on the following occasions:

1. Start up from a standby state.
2. Start up from a shutdown state.
3. Shut down to a standby state.
4. Complete shutdown.

Unit 357

Evaluate and solve problems associated with an electricity generation unit

UAN:	M/600/6115
Level:	3
Credit value:	20
GLH:	120
Aim:	This unit is about evaluating and solving technical problems affecting the operation and function of a generation unit. It involves gathering, collating and assessing information relating to the nature and extent of problems and formulating and implementing plans to resolve them.

Learning outcome
The learner will: 1. be able to assess and evaluate information
Assessment criteria
The learner can: 1.1 make an assessment of the range of information needed to deal with the problem 1.2 determine the information sources to be used to evaluate the problem 1.3 obtain pre-determined and selected sources of information to evaluate problem 1.4 assess the validity, reliability and significance of the information obtained 1.5 search for alternative sources when the information is inadequate or conflicting 1.6 follow procedures and precautions designed to safeguard personnel, plant and the environment.

Learning outcome
The learner will: 2. be able to investigate the extent of the problem
Assessment criteria
The learner can: 2.1 use pre-determined information sources to investigate the problem 2.2 establish the nature and extent of the problem 2.3 determine incidences where the same or similar problems have occurred 2.4 draw valid conclusions in the light of available information 2.5 assess the consequences and impact of the problem 2.6 assess the implications and impact of the problem on maintenance priorities 2.7 evaluate the hazards posed by the problem.

Learning outcome
The learner will: 3. be able to resolve problems and prevent future incidents
Assessment criteria
The learner can: 3.1 coordinate resources to investigate the problem 3.2 determine how to deal with the problem in the light of the prevailing situation 3.3 initiate the actions needed to deal with the problem with an urgency appropriate to its significance 3.4 coordinate actions to make sure the problem is dealt with according to plan 3.5 evaluate actions taken to establish if the problem has been resolved 3.6 follow procedures and precautions designed to safeguard personnel, plant and the environment.

Learning outcome
The learner will: 4. be able to use and communicate data and information
Assessment criteria
The learner can: 4.1 record, organise and store information in accordance with company reporting and documentation systems and procedures 4.2 communicate the results of the investigation and actions taken to resolve the problem 4.3 maintain communications with those that provide information relating to the problem.

Learning outcome
The learner will:

5. be able to resolve problems effectively and efficiently
Assessment criteria
The learner can: 5.1 deal with problems within the limits of own job role responsibility 5.2 report problems outside job role responsibility to designated personnel.

Learning outcome
The learner will: 6. know and understand how to use general knowledge about evaluating and solving problems associated with electricity generation systems
Assessment criteria
The learner can: 6.1 state the main principles of health and safety and environmental legislation and regulations 6.2 state the company reporting lines and authorisation roles and responsibilities 6.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome
The learner will: 7. know and understand how to use industry and context specific knowledge about evaluating and solving problems associated with electricity generation systems
Assessment criteria
The learner can: 7.1 explain why it is important to communicate concisely and accurately 7.2 explain how to minimise risks to self and others when undertaking work activities 7.3 explain how to communicate and record the findings of problem evaluation and actions taken to resolve problems 7.4 describe the basic principles of the electricity systems, sub-systems and equipment. 7.5 explain how to methodically evaluate and resolve problems using problem solving techniques and processes 7.6 identify what information sources are available to support the problem evaluation and problem solving process 7.7 explain how to judge if information use to evaluate problems is valid, reliable and significant.

Unit 357 **Evaluate and solve problems associated with an electricity generation unit**

Supporting information

Scope and range

The learner needs to provide evidence to show that they have evaluated and solved three different types of problem from the following list:

- Control failure and significant deviations from the norm.
- Indication failures.
- Communication failures.
- Alarm malfunctions.
- Plant malfunctions.
- External influences
- Loss of plant security.

Unit 358

Coordinate a response to a unit contingency

UAN:	A/600/6117
Level:	3
Credit value:	20
GLH:	120
Aim:	This unit is about the coordination and response to a contingency situation. It involves being able to identify a contingency situation and coordinating the actions and responses of others to bring the situation under control. It also involves using and communicating data and information and resolving problems.

Learning outcome
The learner will: 1. be able to initiate a response to a contingency
Assessment criteria
The learner can: 1.1 respond promptly to unit alarms 1.2 recognise signs of a contingency as the situation develops 1.3 make use of system information when deciding the response to a contingency 1.4 decide and determine the actions that are needed to deal with the contingency 1.5 carry out response within the limits of your own personal responsibility and in accordance with health and safety rules and regulations 1.6 take action to preserve safety of self and others in the event of a contingency in accordance with health and safety regulations and procedures 1.7 provide directions to others on the actions they need to take in the event of a contingency 1.8 plan and carry out all activities in accordance with company policies and procedures.

Learning outcome

The learner will:

2. be able to coordinate a response to contingency

Assessment criteria

The learner can:

- 2.1 obtain and interpret systems information to monitor the impact the contingency is having on the unit and its operation
- 2.2 gauge the effectiveness of the response
- 2.3 assess the situation to make sure that response is technically valid
- 2.4 monitor and adjust actions when required to increase the effectiveness of the response to a contingency
- 2.5 provide directions and information to those directly and indirectly involved in responding to the contingency
- 2.6 make sure the location of those involved in responding to the contingency is known to you.

Learning outcome

The learner will:

3. be able to use and communicate data and information

Assessment criteria

The learner can:

- 3.1 record the contingency and the actions taken to respond to it to designated and authorised personnel.

Learning outcome

The learner will:

4. be able to resolve problems effectively and efficiently

Assessment criteria

The learner can:

- 4.1 deal with problems within the limits of own job role responsibility
- 4.2 report problems outside the limits of your personal responsibility to designated personnel.

Learning outcome
The learner will: 5. know and understand how to use general knowledge about coordinating a response to a unit contingency
Assessment criteria
The learner can: 5.1 state the main principles of health and safety and environmental legislation and regulations 5.2 state the company reporting lines and authorisation roles and responsibilities 5.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome
The learner will: 6. know and understand how to use industry and context specific knowledge about coordinating a response to a unit contingency
Assessment criteria
The learner can: 6.1 state the company procedures and processes for reporting problems with tools and equipment 6.2 identify what personal protective equipment needs to worn when undertaken work activities 6.3 describe how to maintain safe working and environmental practices throughout the duration of the work 6.4 explain how to minimise risks to self and others when undertaking work activities 6.5 explain what the layout is of the system, including where system controls are to be found 6.6 explain how to respond to the different types and categories of emergency situations that might occur 6.7 explain why it is important to give others clear and accurate directions; what information do they need to carry out the actions asked of them 6.8 describe what factors should be taken into account when deciding if a response is effective or not 6.9 state what others need to be told in order for them to respond to a contingency effectively 6.10 identify what the layouts are of the systems within the unit 6.11 state the protocols to follow to determine what actions to take in response to a contingency. 6.12 confirm who is responsible for what actions in the control room and on the plant 6.13 describe what sorts of contingencies can arise and how to deal with them, including when an emergency shut-down of the unit is necessary.

Unit 358 Coordinate a response to a unit contingency

Supporting information

Scope and range

The learner needs to provide evidence to show that they have initiated and coordinated the response to three different contingencies taken from the following list:

- System/equipment malfunction or failure.
- Unpredicted operational deviations.
- High risk of fire or explosion.
- External influences and safety.
- Environmental influences.

Unit 359

Handover and accept responsibility for the operation of an electricity generation unit

UAN:	J/600/6119
Level:	3
Credit value:	20
GLH:	120
Aim:	This unit is designed to ensure that operatives can handover and accept responsibility for the operation of an electricity generation unit whilst maintaining its integrity during the transfer. It also involves using and communicating data and information and resolving problems.

Learning outcome
The learner will: 1. be able to prepare for the handover of the unit
Assessment criteria
The learner can: 1.1 determine the information that needs to be communicated to designated personnel prior to the handover 1.2 determine the operating status of the generation unit in line with operating parameters.

Learning outcome
The learner will: 2. be able to handover responsibility for operation of the unit
Assessment criteria
The learner can: 2.1 maintain system, plant and apparatus parameters under control during handover 2.2 provide information on all recent events, parameters and status affecting systems, plant and apparatus 2.3 follow procedures and precautions designed to safeguard personnel, plant and the environment.

Learning outcome
The learner will:

3. be able to accept responsibility for operation of the unit
Assessment criteria
The learner can: 3.1 obtain all the written and verbal information you require to accept responsibility 3.2 confirm the accuracy and completeness of the information provided prior to accepting responsibility 3.3 ensure that you correctly understand the plant and system parameters and situation 3.4 provide information and support outgoing person to minimise and avoid disruption to operations during the handover.

Learning outcome
The learner will: 4. be able to use and communicate data and information
Assessment criteria
The learner can: 4.1 ensure that all records are complete and up to date 4.2 communicate written and verbal information on the status of unit and system to the incoming/outgoing person before leaving the workstation 4.3 give the incoming and outgoing person the opportunity to ask questions and make sure that they fully understand the situation 4.4 obtain confirmation that the handover has been accepted 4.5 read and interpret company work instructions and supporting documentation 4.6 provide designated personnel with personal contact details on completing handover 4.7 actively seek out any additional information and clarification if any aspects of the situation are unclear.

Learning outcome
The learner will: 5. be able to resolve problems effectively and efficiently
Assessment criteria
The learner can: 5.1 deal with problems within the limits of own job role responsibility 5.2 report problems outside job role responsibility to designated personnel.

Learning outcome
The learner will: 6. know and understand how to use general knowledge about handing over and accepting responsibility for the operation of an electricity generation unit
Assessment criteria
The learner can:

- 6.1 state the main principles of health and safety and environmental legislation and regulations
- 6.2 state the company reporting lines and authorisation roles and responsibilities
- 6.3 state the company policies and procedures that directly impact on the work to be undertaken.

Learning outcome

The learner will:

- 7. know and understand how to use industry and context specific knowledge about handing over and accepting responsibility for the operation of an electricity generation unit

Assessment criteria

The learner can:

- 7.1 confirm what sort of information needs to be communicated at handover and why
- 7.2 explain why it is important to communicate concisely and accurately
- 7.3 explain how to minimise risks to self and others when undertaking work activities
- 7.4 state company work instruction, information and reporting systems and documentation
- 7.5 explain how to respond to the different types and categories of emergency situations that might occur
- 7.6 explain why it is your responsibility to allow others to clarify and confirm their understanding of the situation
- 7.7 confirm who has responsibility for maintaining systems during handover
- 7.8 confirm what organisational requirements typically exist in relation to the process of a shift handover
- 7.9 confirm what records need to be kept
- 7.10 explain why it is important that the transfer of responsibility is accepted by the oncoming person before you leave the area
- 7.11 identify what support might be needed to maintain systems during handover
- 7.12 confirm who needs to know about the contact details of the oncoming person and how should these be relayed
- 7.13 state what organisational requirements typically exist in relation to the process of a shift handover
- 7.14 describe the basic principles of the electricity generation process
- 7.15 demonstrate an understanding of system operating principles.

Unit 359 Handover and accept responsibility for the operation of an electricity generation unit

Supporting information

Scope and range

The learner needs to provide evidence to show that they have handed over and accepted responsibility for the unit on the following occasions:

1. Handed over responsibility for the unit when conditions are stable.
2. Handed over responsibility for the unit when conditions are dynamic.
3. Handed over responsibility for the unit when there is an ongoing problem which has not been solved at the time of handover.
4. Accepted responsibility for the unit when conditions are stable.
5. Accepted responsibility for the unit when conditions are dynamic.
6. Accepted responsibility for the unit when there is an ongoing problem which has not been solved at the time of handover



Appendix 1 Relationships to other qualifications

Literacy, language, numeracy and ICT skills development

This qualification can develop skills that can be used in the following qualifications:

- Functional Skills (England) – see www.cityandguilds.com/functionalskills
- Essential Skills (Northern Ireland) – see www.cityandguilds.com/essentialskillsni
- Essential Skills Wales – see www.cityandguilds.com/esw



Appendix 2 Sources of general information

The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on www.cityandguilds.com.

Centre Manual - Supporting Customer Excellence contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- SQA Awarding Body Criteria (2007)
- NVQ Code of Practice (2006)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

Access to Assessment & Qualifications provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on such things as:

- **Walled Garden:** how to register and certificate candidates on line

City & Guilds Level 3 Diploma in Electrical Power Engineering - Power Plant Operations (2339-35) Electrical Power Engineering – Power Plant Operations (2339-35)

- **Events:** dates and information on the latest Centre events
- **Online assessment:** how to register for e-assessments.

Centre Guide – Delivering International Qualifications contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve ‘approved centre’ status, or to offer a particular qualification. Specifically, the document includes sections on:

- The centre and qualification approval process and forms
- Assessment, verification and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Frequently asked questions.

Useful contacts

UK learners General qualification information	T: +44 (0)844 543 0033 E: learnersupport@cityandguilds.com
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: singlesubjects@cityandguilds.com
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: intops@cityandguilds.com
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: walledgarden@cityandguilds.com
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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