



Qualification Specification

EEA Level 3 Certificate for Overhead Tower Linesperson
Erector (LE3)
610/7648/X

EEA Level 3 Diploma for Overhead Tower Linesperson
Erector (LE2)
610/7649/1

EEA Level 3 Diploma for Overhead Tower Linesperson
Erector (LE1)
610/7650/8

June 2026 v1.0

Contents

1	Qualification Overview	4
	At a Glance Qualification Summary	4
	Energy & Environment Awards (EEA)	5
	Introduction	5
	Aims and Objectives of the Qualification.....	5
	Assessment Method: Portfolio of Evidence.....	6
2.	Qualification Information	15
	Unit Achievements	15
	Recognition of Prior Learning	15
	Pre-requisites.....	15
	Qualification Structures.....	16
3.	Unit Content.....	17
4.	Awarding.....	54
	Grading.....	54
	Certification.....	54
5.	Energy & Environment Awards Policies	54
	Contact Us.....	54

Updates to this Specification

Since the first publication of this Qualification Specification, the following updates have been made.

1 Qualification Overview

At a Glance Qualification Summary

Qualification titles	EEA Level 3 Certificate for Overhead Tower Linesperson Erector (LE3) (610/7648/X)
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE2) (610/7649/1)
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE1) (610/7650/8)
Min. Guided Learning Hours (GLH)	EEA Level 3 Certificate for Overhead Tower Linesperson Erector (LE3): 207 GLH
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE2): 299 GLH
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE1): 409 GLH
Min. Total Qualification Time (TQT)	EEA Level 3 Certificate for Overhead Tower Linesperson Erector (LE3): 299 TQT
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE2): 423 TQT
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE1): 567 TQT
RQF Level	3
Qualification credit value	EEA Level 3 Certificate for Overhead Tower Linesperson Erector (LE3): 30 Credits
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE2): 42 Credits
	EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE1): 57 Credits
Assessment requirements	Each qualification is assessed by Portfolio of Evidence. Further details on the assessment requirements which underpin the qualification and unit-specific evidence requirements can be found in this specification.
Regulatory Body / Status	These qualifications are regulated by Ofqual, the independent qualifications regulator for England.

Energy & Environment Awards (EEA)

Energy & Environment Awards is an Ofqual recognised Awarding Organisation, offering End-point Assessments and Qualifications within the energy and utilities footprint.

Introduction

Energy & Environment Awards has secured recognition from Ofqual, the independent qualifications regulator for England, to offer the:-

- EEA Level 3 Certificate for Overhead Tower Linesperson Erector (LE3)
- EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE2)
- EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE1)

These qualifications have been developed through consultation with key external stakeholders, including employers, training providers and technical experts.

This Qualification Specification provides guidance for approved Centres on how to consistently apply the assessment requirements along with unit content and relevant additional information to support the delivery of these qualifications.

Aims and Objectives of the Qualification

The purpose of the Level 3 Overhead Tower Linesperson Erector qualifications is to develop the learner's technical skills and underpinning knowledge in all aspects of Overhead Lines Operations. There are three qualifications aimed at the Overhead Linesperson Erector class roles, LE3, LE2 and LE1.

These qualifications are suitable for individuals who are aged 16 or above and are employed as an Overhead Linesperson Erector working on overhead line power transmission networks.

The qualifications contain the underpinning knowledge and skills that are required to deem a learner competent to be an Overhead Linesperson Erector. These qualifications have been designed and developed in accordance with legislative and industry requirements for the Power industry.

The qualification structures and units of achievement have been designed through consultation with employers, training providers and technical experts. The units have been written to align with the industry agreed occupational profile and the core elements of the Power Industry Overhead Linesperson apprenticeship standard.

Assessment Method: Portfolio of Evidence

Assessment Preparation

Assessors will need to prepare fully for supporting learners in their collation of evidence for the Portfolio of Evidence. It is our expectation that the Centre's Assessor will ensure the learner's Portfolio of Evidence meets these requirements and any unit-specific evidence requirements / guidance. In order to sufficiently prepare for the assessment, Centres, and specifically Assessors, will need to:-

1. Liaise with the learner's employer to provide clear expectations on their role within the assessment process, including any requirement to contribute to assessment evidence and/or to sign off pieces of evidence.
2. Fully understand the unit-specific assessment / evidence requirements and/or guidance, including any range statements included within the unit content.
3. Fully understand the requirements of this specification.
4. Familiarise themselves with the information and documentation contained within the **Energy & Environment Awards Overhead Tower Linesperson Erector Learner Assessment Guidance Pack**.
5. Ensure each learner has a copy of the **Energy & Environment Awards Overhead Tower Linesperson Erector Learner Assessment Guidance Pack** for the qualification and understands how to use the documentation appropriately.
6. Seek approval from Energy & Environment Awards for the use of realistic work environments (RWE) and simulation as supporting evidence, where allowed within the individual unit.

Assessment

These qualifications are assessed wholly by a Portfolio of Evidence, which is a collection of pieces of evidence generated by the learner, which demonstrate a learner's competence and underpinning knowledge for each unit they are registered on.

With evidence generation it is important to note that the learner's workplace should, where possible, be used as the assessment location and that naturally occurring workplace evidence is the primary source for determining competence. There may be exceptions to this, for example, where an environment similar to the learner's own workplace (for example another site) is allowed to be used to demonstrate competence where it is not possible within the learner's own workplace as a realistic work environment (RWE). Similarly, some units allow the use of simulation where it is not possible to complete the work activity in a real work situation, for example an emergency. Individual units stipulate whether RWE and/or simulation is allowed and

approved Centres wishing to deliver an assessment in an RWE or through simulation must have been approved by Energy & Environment Awards as having the specific, appropriate resources and site environment to use RWE or simulation according to the requirements of each unit. Further information on RWE and simulation can be found in the following sections.

Assessment in a realistic work environment

Energy & Environment Awards will:

1. Approve and monitor when an assessment can be carried out in a realistic work environment, in situations where a real-life application of the task may not be appropriate or safe, in accordance with the unit-specific evidence guidance.
2. Ensure the external quality assurance process incorporates ongoing monitoring to ensure the facilities remain compliant with the specification.
3. Ensure Centres are able to seek prior confirmation on the appropriateness of using a realistic work environment for a planned assessment.

Centres will:

1. Operate a realistic work environment (RWE) only in an environment which reflects a real work setting, and for units in which a RWE is permitted. This will ensure any competence achieved in this way will be sustained in real employment.

The following contexts are illustrations where assessment in a realistic work environment might be used:

- Where demonstration of emergency shutdown and related safety procedures would be **dangerous and /or disruptive** to plant/environment/individuals; **too costly** such as total plant shutdown or dealing with spillage of dangerous substances; where **issues of confidentiality** restrict access to real work opportunities
- Demonstrating specific aspects of the operation which rarely occur or are not likely to occur in a timely manner for the assessment of the learner
- The capacity to integrate disparate knowledge to cope with unforeseen events and to solve problems
- Aspects of working relationships and communications where no opportunity has been presented for the use of naturally occurring workplace evidence of learner's performance.



Where in a real-life scenario, 'live' working solely for the purpose of assessment cannot be justified.

To undertake the assessment in a RWE the following conditions must be met:

1. Assessments must be carried out under realistic work conditions that are found in the normal industry workplace.
2. Assessments must be carried out in conditions and facilities which are typical of those encountered in the normal industry workplace.
3. The range of materials, equipment and tools that learners use must be up-to-date and be of the type routinely found in the normal industry workplace environments.
4. All work carried out must be completed in a way, and to a timescale, that is acceptable in the normal industry workplace.
5. Learners should interact with the range of personnel found in the normal industry workplace, where it is appropriate to do so.
6. Learners must be expected to complete the task to the standard expected in the workplace and in line with the learning outcomes and assessment criteria.
7. Learners must be given workplace responsibilities that will enable them to meet the requirements of the unit in full.
8. Learners must show their productivity reflects that found in the work situation being replicated.
9. The RWE must take into account legislation, regulations, codes of practice, etc. which pertain to the regulated environment.
10. The RWE must be managed as a real work situation.
11. RWE can only be allowed if stipulated in the individual unit and approved by Energy & Environment Awards.

Simulation

Energy & Environment Awards defines simulated activities as those which are carried out without the environment resources or equipment found within the workplace and/or involve acting or other scenarios which are not 'real' work tasks.

Conditions for simulation:

- The simulated situation can represent situations which rarely occur or are exceptional in any other way and may be used to complement or support a realistic work environment (RWE).
- The people taking part in the simulation must have a brief which gives sufficient information to them to recognise the equivalent real situation and decide what

they would do and say. This must be available at External Quality Assurance monitoring if requested.

- The people taking the parts of other personnel or customers must be credible for the situation that is being simulated.
- The simulated situation should not require the learners to experience unusually difficult circumstances which are outside the normal scope of the job role.
- Simulation is only allowed if stipulated in the individual unit.

Energy & Environment Awards will approve and monitor the use of simulation as supporting evidence for performance in the workplace, through stipulating within individual units when it can be allowed.

Centres will ensure that simulation is only used for units in which simulation is permitted in line with the assessment requirements.

Types of Evidence

It is important to note that this list is not exhaustive but does provide a starting point for learners and Assessors to identify suitable pieces of evidence:-

- Assessor observations
- Detailed witness testimonies
- Company records, plans and/or reports
- Photographs, plans and/or sketches of activities, with details of the work activity in which the learner has been involved
- E-mails, minutes or meetings or other records of correspondence, with details of the work activity in which the learner has been involved
- Assessor questioning and answers
- Written/recorded responses to questions asked by the assessor
- Learner write up / report / project
- Case studies
- Professional discussion

Energy & Environment Awards requires each unit to be assessed through a mix of different evidence types, in line with the evidence requirements and/or guidance within each unit.

With any piece of evidence it is important to include the following:-

- Details of the work activity undertaken by the learner or their role within the task where it has been completed as part of a group activity.
- Learner declaration to confirm that the evidence generated is the learner's own work with details of where a third party or additional source may have been used to support the evidence generated. The **Energy & Environment**

Awards Overhead Tower Linesperson Erector Evidence Declaration Form within the ***Overhead Tower Linesperson Erector Learner Assessment Guidance Pack*** can be used for this purpose.

- Training provider and employer declaration to confirm that the evidence provided is an accurate reflection of the learner's knowledge, understanding and/or competence and that it is the learner's own work (***Energy & Environment Awards Overhead Tower Linesperson Erector Evidence Declaration Form*** within the ***Energy & Environment Awards Overhead Tower Linesperson Erector Learner Assessment Guidance Pack***).
- Cross-reference mapping to indicate which learning outcomes and assessment criteria have been achieved through each piece of evidence (***Energy & Environment Awards Evidence Matrices*** within the ***Energy & Environment Awards Overhead Tower Linesperson Erector Learner Assessment Guidance Pack***).

As referenced above Energy & Environment Awards has provided documentation in the ***Energy & Environment Awards Overhead Tower Linesperson Erector Learner Assessment Guidance Pack*** for these qualifications. Although Centres may use their own documentation or electronic portfolio systems if they prefer, provided that the content is in line with, and equivalent to, our requirements.

Assessment Decisions

The Assessor will review each piece of evidence in full, ensuring it meets the requirements of the assessment and the individual unit requirements including learning outcomes and assessment criteria. The Assessor will determine which pieces of evidence best demonstrate the learner's knowledge, understanding and skills for each unit and cross reference these pieces of evidence to the relevant assessment criteria that they address on the unit-specific evidence matrix. All evidence included in the Portfolio of Evidence should meet the requirements of VARCS; valid, authentic, reliable, current and sufficient and is relevant and specific to the individual learner.

Energy & Environment Awards has provided an evidence matrix for each unit within these qualifications in the ***Energy & Environment Awards Overhead Tower Linesperson Erector Learner Assessment Guidance Pack***. Although Centres may use their own documentation or electronic portfolio systems for this purpose if they prefer.

In order to assess a learner as "competent" in the required skills and underpinning knowledge and understanding, Energy & Environment Awards would typically expect a learner to produce three pieces of evidence; one of which should be generated on a work site (unless this is not appropriate to the work activity being assessed and the unit allows for simulation or realistic working environment). Where possible, evidence

should be collected from a range of sites and/or from different sources, this enables the learner to demonstrate that they have consistently applied the relevant skills and/or knowledge and understanding to their work activities. However, Energy & Environment Awards recognises that there may be occasions when fewer pieces of evidence or even one piece of evidence, can also fully meet these requirements. Similarly, a single piece of evidence may cover, or partially cover, the assessment criteria within more than one unit.

When a learner is deemed to be competent in an individual unit the Assessor needs to ensure the Energy & Environment Awards evidence matrix (or Centre-specific form) for the relevant unit is completed in full and is signed by the learner, the Assessor and the Employer. There is also space for the Centre's IQA to sign in line with the Centre's IQA sampling policy. The Centre will record the assessment decision as "Achieved" on QuartzWeb. QuartzWeb is the Energy & Environment Awards web based learner management system for Approved Centres.

All learners must be registered with Energy & Environment Awards through QuartzWeb in order for learners' achievement to be recognised and certificated.

Assessment Resources and Personnel Requirements

Safety is a key consideration for any assessment / quality assurance personnel (assessment personnel) involved in the delivery of these qualifications. Each unit has an element of health and safety, which needs to be considered as part of the assessment process and all assessment personnel need to be mindful of their own personal safety and the safety of others during all assessment activities. Assessment personnel must lead by example in terms of the use of personal protective equipment (PPE) and have a responsibility to stop the assessment and to alert a relevant member of staff where unsafe practices are observed. All assessment personnel, including IQAs and EQAs where they are present at an assessment instance, must be familiar with, and apply, the organisation's safe working practices and associated risk assessments.

Centres will:

1. Meet the Energy & Environment Awards Centre approval and regulatory requirements for this qualification, relating to sufficient resources, facilities and personnel.
2. Have in place qualified and trained **Assessors**, who meet the requirements outlined below.
3. Have in place qualified and trained **Internal Quality Assurers (IQAs)** who meet the requirements outlined below and are independent from the training

that has taken place.

4. Keep under review the need for additional / different Assessors and/or IQAs.

Energy & Environment Awards will:

1. Have in place qualified and experienced **External Quality Assurers (EQAs)** who meet the requirements outlined below and have expertise in the subject matter.
2. Keep under review the need for additional / different EQAs.

Assessors

The Assessor is the person responsible for making decisions as to whether a learner has met the required assessment criteria within a qualification. Centre's must comply with both the qualification and sector experience requirements for Assessors, as outlined below as part of the qualification-specific Centre approval requirements. Assessors are responsible for making and recording assessment decisions in the Portfolio of Evidence

They will support the learner in identifying suitable pieces of evidence to include within their portfolio of evidence and they will assess the portfolio of evidence to ensure that it meets the assessment requirements outlined within this specification.

Assessors must meet the following requirements:

- Demonstrate a high level of interpersonal and communication skills.
- Have current overhead linesperson erector occupational and industry competence and knowledge.
- Have up-to-date knowledge of current practice and emerging issues within the industry, including awareness that there may be differences between the 4 UK countries and/or between different adopting network operators.
- Have a thorough understanding of the qualification they are assessing and are able to competently assess learners' evidence to ensure all assessment criteria are met in line with the assessment requirements and any unit-specific evidence requirements.
- Show experience and working knowledge of assessment and quality assurance processes relevant to their context.
- Demonstrate relevant, current and credible experience and knowledge, with evidence of CPD and occupational skills.
- Have, or be working towards, being qualified - Assessor or Quality Assurance qualification (TAQA*) plus CPD.

**Energy & Environment Awards will also accept predecessor qualifications, for example TDLB units including D32, D33, D34 or A1, V1, V2 etc. Other qualifications must be presented at Centre approval and will be considered on a case by case*

basis. An employer direct model as an alternative to assessors and quality assurers achieving the TAQA qualifications can be used.

This model allows employer/alternative training, which is endorsed by the awarding body, to be used as a means of demonstrating assessor and verifier competence.

In this instance Energy & Environment Awards require Centre's to have:

- *mapped the training against the relevant TAQA qualifications to ensure that there is a direct match.*
- *identified any gaps and ensured that alternative evidence to demonstrate full competence is provided.*
- *provide written endorsement which indicates acceptance of the training as a direct equivalent to the TAQA qualifications.*

Internal Quality Assurance

The Centre's IQA will sample learners' assessment decisions and documentation and observe assessment discussions between the Assessor and the learner according to the Centre's IQA sampling approach, which will have been approved by Energy & Environment Awards as meeting the quality assurance requirements for these qualifications.

IQAs will keep records of the assessments which are sampled in line with their IQA policy and process. These reports provide essential evidence for the Energy & Environment Awards EQAs for determining whether the qualification is being assessed in line with the assessment requirements outlined in this specification, Energy & Environment Awards Centre approval requirements and the Centre's own quality assurance policies and procedures.

IQAs are also required to ensure consistency across the Centre's Assessors through monitoring assessment decisions, holding regular standardisation meetings and ensuring the assessment requirements are fully understood and being implemented appropriately. IQAs are also involved in the escalation and/or investigation of any issues or queries or potential malpractice relating to the assessment, grading decisions and the Assessor's occupational competence.

IQAs must meet the following requirements:

- Demonstrate a high level of interpersonal and communication skills.
- Have current overhead linesperson erector occupational and industry competence and knowledge.

- Have up-to-date knowledge of current practice and emerging issues within the industry, including awareness that there may be differences between the 4 UK countries and/or between different adopting network operators.
- Have a thorough understanding of the qualification they are quality assuring and be able to interpret the qualification and offer advice on assessment-related matters.
- Show experience and working knowledge of assessment and quality assurance processes relevant to their context.
- Demonstrate relevant, current and credible experience and knowledge, with evidence of CPD and occupational skills.
- Have, or be working towards, being qualified - Assessor or Quality Assurance qualification (TAQA*) plus CPD.

External Quality Assurance

Energy & Environment Awards externally quality assures the Level 3 Overhead Tower Linesperson Erector qualifications through appointing each Centre an EQA, who is responsible for checking and monitoring the assessment and quality assurance practices within the Centre to ensure assessments are conducted and quality assured in a robust, consistent manner. The EQA does this through:-

- Approving Centres according to the Energy & Environment Awards qualification-specific Centre approval criteria and carrying out a visit as part of this approval, where required.
- Approving and monitoring where an assessment can be carried out in either a realistic work environment (RWE) or through simulation.
- Determining the sampling approach for each Centre, according to their risk, volume of learners and history as an approved Centre.
- Planning and conducting EQA visits to Centres, at least once a year. The frequency of these visits will again be determined on a risk-based approach and the volume of learners. An EQA may also visit a Centre more frequently where assessments are being conducted in a live work-based site situation rather than at a Centre in a simulated environment. EQA visits will enable the EQA to observe live assessments, sample learner's evidence and assessment decisions and to review internal quality assurance documentation and practices to ensure the Centre is delivering a robust internal quality assurance of the assessment decisions which Assessors make.
- Writing a report on their findings for both the Centre and Energy & Environment Awards which details the EQAs findings, including any areas where remedial action is required and an action plan to be agreed with the Centre.
- Providing advice and support to Centres in relation to meeting the assessment requirements

2. Qualification Information

Unit Achievements

As you will see from the qualification structures in the section that follows all of the units in Group A are mandatory units which are common to all of the Overhead Tower Linesperson Erector qualifications.

Once the learner has achieved these units they do not need to complete them again if they decide to move onto a further Level 3 Overhead Tower Linesperson Erector qualification with Energy & Environment Awards, instead they can be exempt from having to achieve the unit a second time.

Recognition of Prior Learning

Energy & Environment Awards has a comprehensive Recognition of Prior Learning (RPL) and Recognition of Prior Achievement (RPA) Policy, which all approved Centres have access to and is available at www.energyenvironmentawards.co.uk/policies-and-fees/. This policy sets out our approach to the Recognition of Prior Learning (RPL) and Recognition of Prior Achievement (RPA), providing guidance on what constitutes acceptable evidence and the circumstances when RPL or RPA would, and would not be acceptable, in order to for us to meet our Regulatory requirements.

Recognition of Prior Learning applies to the acceptance of evidence that the learner has completed learning which may exempt them from certain elements of training but it will not exempt them from the assessment(s). This may, for example, apply to experienced workers who do not require as much training as new entrants to the role / sector.

Learners are also able to be registered on, and achieve, individual units where appropriate instead of completing the full qualification.

Pre-requisites

There are no pre-requisites for entry to this qualification.

Qualification Structures

In order to achieve the **EEA Level 3 Certificate for Overhead Tower Linesperson Erector (LE3)** qualification, learners must complete all mandatory units in Group A and the mandatory unit in Group B1.

.....

In order to achieve the **EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE2)** qualification, learners must complete all mandatory units in Group A, the mandatory unit in Group B1 and all mandatory units in Group B2.

.....

In order to achieve the **EEA Level 3 Diploma for Overhead Tower Linesperson Erector (LE1)** qualification, learners must complete all mandatory units in Group A, the mandatory unit in Group B1, all mandatory units in Group B2 and all mandatory units in Group B3.

.....

Group A: Mandatory units for all learners	
EEA Unit Ref:	Unit Title:
1709	Maintain work site health, safety and environmental compliance in overhead lines activities
1710	Principles of overhead lines tower operations and industry
1711	Undertake utility linesperson activities

Group B: Pathway-specific mandatory units	
Group B1: Mandatory for LE3, LE2 and LE1	
EEA Unit Ref:	Unit Title:
1712	Contribute effectively to replacement of overhead line towers, conductors, insulators and fittings as a Linesperson Erector 3
Group B2: Mandatory for LE2 and LE1	
EEA Unit Ref:	Unit Title:
1713	Preparing to undertake activities on overhead lines as a Linesperson Erector 2
1714	Undertake activities on overhead lines as a Linesperson Erector 2
Group B3: Mandatory for LE1	
EEA Unit Ref:	Unit Title:
1715	Plan, prepare and lead overhead line work activities as a Linesperson Erector 1
1716	Lead activities on overhead lines as a Linesperson Erector 1

3. Unit Content

In each of the units there are some words which are emboldened in the assessment criteria. These emboldened words have a range statement associated with them, which appears at the end of the unit, and indicates what the learner must cover.

These range statements often refer to words or statements where there are multiple elements for the learner to be trained and subsequently assessed on, or where the statement in the assessment criteria is very broad. They provide a focus for the learner and an indicator of what the learner must cover. For example, “**Power industry regulations**” includes Electricity at Work Regulations, The Electricity Safety, Quality and Continuity Regulations (ESQCR).

EEA Unit Ref:	1709
Ofqual Unit Ref:	H/652/1952
Unit Title:	Maintain work site health, safety and environmental compliance in overhead lines activities
Level:	3
Credit value:	7
GLH:	41
TQT:	67
Unit aim(s):	This unit allows learners to understand relevant health, safety and environmental knowledge so that work can be properly assessed, and appropriate risk-reduction methods can be implemented.
Assessment Requirements:	Portfolio of Evidence
Relationship to industry standards and frameworks:	This unit aligns with the Occupational Profile for Overhead Lines LE3 and the core elements of the Power Industry Overhead Linesperson apprenticeship standard.

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand the work site health, safety and environmental compliance requirements	1.1 Describe the purpose and key requirements of health and safety regulations, standards and guidance
	1.2 Describe the roles and responsibilities of employers and employees under health and safety regulations
	1.3 Describe the purpose and key requirements of the Environmental Protection Act and its impact on work practices
	1.4 Describe the importance of Distribution Safety Rules
	1.5 Explain the recycling and waste transfer requirements as part of organisational sustainability responsibilities and waste management procedures
2. Know and understand hazards and risks associated with overhead linesperson work activities and sites	2.1 Describe the hazards associated with work on or near electrical power networks
	2.2 Explain the dangers of electricity , including how an electric shock can be received and associated emergency procedures
	2.3 Describe the dangers associated with impressed voltage
	2.4 Describe the importance and purpose of risk assessments and method statements
	2.5 Outline the key steps involved in a risk assessment
	2.6 Outline the fire hazards associated with overheads linesperson activities
	2.7 Recommend additional mitigation strategies to enhance safety and reduce risk exposure
3. Know and understand safe working practices and procedures	3.1 Describe safe manual handling techniques and requirements
	3.2 Outline the importance of safety documentation and the different types used
	3.3 Outline the procedure for signing on to safety documentation and the implications of non-compliance
	3.4 Describe the range of Personal Protective Equipment suitable to work activities
	3.5 Describe fire safety procedures and requirements
	3.6 Describe asset security requirements
	3.7 Describe the requirements for checking plant, equipment and vehicles
	3.8 Describe working in proximity to live apparatus protocols
4. Know and understand safe working at height practices	4.1 Describe working at height requirements and risks
	4.2 Explain safe methods of access and egress
	4.3 Explain hierarchy of methods

	4.4	Describe basic inspection, operation and maintenance requirements for the range of working at height Personal Protective Equipment
	4.5	Describe rescue from height equipment, methods and team members' responsibilities
5. Know and understand mental health awareness	5.1	Outline signs of mental health issues in self and others
	5.2	Describe the importance of mental health in the workplace and its impact on safety and productivity
6. Know and understand emergency procedures	6.1	Describe emergency procedures
	6.2	Describe emergency first aid requirements and the role of the first aider
7. Be able to comply with work site health, safety and environmental requirements	7.1	Demonstrate how to receive and clear a safety document
	7.2	Demonstrate how to follow protocols for safe entry and exit from site
	7.3	Demonstrate how to use correct Personal Protective Equipment
	7.4	Demonstrate how to brief a working party
	7.5	Identify hazards and risks and apply control measures
	7.6	Apply health and safety procedures which comply with regulations, standards and guidance
	7.7	Demonstrate how to respond in the event of an emergency first aid situation, including situations where there is an electrical risk
	7.8	Promote a supportive environment that encourages open discussions about mental health
8. Be able to maintain the work site's safety, security and sustainability	8.1	Take measures to leave power work environments in a safe condition
	8.2	Implement waste management procedures that comply with environmental legislation and sustainability principles
	8.3	Make recommendations for improvements to overhead lines activities including ways to improve network safety and sustainability
	8.4	Communicate with the logistics team to ensure the safe and efficient movement of materials and equipment
9. Be able to perform overhead linesperson erector work activities in a safe way	9.1	Demonstrate how to check, install, secure and use working at height access equipment
	9.2	Check overhead line plant and apparatus is safe to access, install flag and check wristlets if required
	9.3	Select, inspect and use working at height Personal Protective Equipment

	9.4	Apply safety measures and follow company procedures when working at height
	9.5	Demonstrate correct techniques for blocking in and clipping in during work at height in accordance with organisational procedures
	9.6	Demonstrate how to follow organisation climbing procedures and safety protocol
	9.7	Escalate issues outside limits of responsibility
	9.8	Complete work and safety records accurately
	9.9	Apply manual handling techniques to prevent injury
10. Be able to respond appropriately in an emergency situation	10.1	Implement emergency procedures effectively
	10.2	Participate in tower rescue drills to practice emergency response and rescue techniques
	10.3	Demonstrate how to fit and operate a rescue device at height
	10.4	Demonstrate how to identify and manage potential fire hazards

Range Statements:

Learning Outcome 1:

Insulating medium: include oil, vacuum, MIDELE, EconIQ and SF6

Health and safety regulations, standards and guidance include: asbestos awareness, Construction Design Management (CDM), Health and Safety at Work Act, Control of Substances Hazardous to Health (COSHH), Lifting Operations and Lifting Equipment Regulations (LOLER), lone working, Management of Health and Safety at Work, Provision and Use of Work Equipment Regulations (PUWER), Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Electricity at Work Regulations (EAWR), Electricity Safety Quality Continuity Regulations (ESQCR), Model Distribution Safety Rules (MDSR) and warning signs and symbols.

HSE guidance include: HSG47 (Avoiding danger from underground services) and GS6 (Avoiding danger from overhead power lines)

Learning Outcome 2:

Dangers of electricity include: direct contact, induced (impressed) voltage and arcing.

Hazards and controls include: security, pre-entry checks, logging in requirements, automatic or remotely operated equipment, and fire suppression systems.

Learning Outcome 3:

Personal Protective Equipment to include climbing equipment.

Safe Working Practices include vehicle check-lists, buried and overhead services plans, visual clues such as previous excavation 'scarring', other equipment nearby.

Learning Outcome 4 and 9:

Working at height Personal Protective Equipment include: harnesses, fall restraint and guardrails.

Working at height access equipment to include: ladders, spacer trolley, jumper baskets. Understand Employers' Processes and procedures

Learning Outcome 6 and 10:

Emergency Procedures include location of first aid personnel and equipment, environmental incident response procedures and equipment (e.g. spill kits).

Learning Outcome 7:

Regulations, standards and guidance to include the following but this is not an exhaustive list: Demarcate the work area, working at height, confined spaces, COSHH, HS(G) 47, GS6

Learning Outcome 8:

Security measures include, for example: **set alarm system, remove climbing aides**

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment

EEA Unit Ref:	1710
Ofqual Unit Ref:	J/652/1953
Unit Title:	Principles of Overhead Lines Tower operations and industry
Level:	3
Credit value:	9
GLH:	54
TQT:	88
Unit aim(s):	This unit is designed to develop the learner's underpinning knowledge and skills in the key activities undertaken by a Linesperson Erector. It also provides an introduction to the Power industry and the key equipment and components that the learner will be working with.
Assessment Requirements:	Portfolio of Evidence
Relationship to industry standards and frameworks:	This unit aligns with the Occupational Profile for Overhead Lines LE3 and the core elements of the Power Industry Overhead Linesperson apprenticeship standard.

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand the power network industry	1.1 Describe core functions and the structure of the power network industry
	1.2 Outline the role and responsibilities of the regulatory body
	1.3 Outline the key requirements of the power industry regulations
	1.4 Describe the responsibilities of persons as defined in industry safety rules, including authorisation roles and responsibilities
	1.5 Explain the power network's net zero strategy
2. Know and understand the Linesperson Erector role and how it fits within the wider organisation	2.1 Describe the roles and responsibilities of a Linesperson Erector
	2.2 Outline limitations of role and escalation procedures
	2.3 Describe different teams and functions involved in overhead lines activities and how they work together
	2.4 Outline business operational considerations
3. Know and understand overhead lines components and electrical equipment	3.1 Explain the different types of towers used in electrical transmission and distribution
	3.2 Describe the structural characteristics and purposes of each tower type
	3.3 Outline the different sizes and types of conductors used in electrical systems and their key characteristics.
	3.4 Outline the causes and consequences of common installation faults with conductors
	3.5 Outline the different types of insulators used and their applications in electrical systems.
	3.6 Describe the function of insulators and their role in maintaining system integrity
	3.7 Outline key procedures for the safe removal and replacement of tension and suspension insulators
	3.8 Outline the role of spacers in maintaining in maintaining system integrity and safety
	3.9 Outline the different components of overhead lines and their functions
	3.10 Identify different support structures capable of carrying 132kV and above and their support mechanisms requirements

	3.11	Outline the installation and maintenance requirements for overhead lines components.
	3.12	Describe the properties and purpose of power engineering electrical plant and apparatus including: <ul style="list-style-type: none"> • transformers • switchgear • earthing devices • voltage control • automated equipment
	3.13	Outline the transmission support structures construction methods, including requirements for support mechanisms and temporary stays
4. Know and understand how to use information and digital technology in overhead lines operations	4.1	Explain how information and digital technology is used in overhead lines work activities including hardware and software
	4.2	Outline key regulatory requirements associated with use of information and digital technology
	4.3	Outline key software packages used by companies to manage resources and plan work
5. Know and understand how to work effectively as part of a Linesperson Erector team	5.1	Describe how to plan and prioritise own work using organisation and time management techniques
	5.2	Identify how own work activities may impact customers
	5.3	Describe team working principles and the importance of teamwork in achieving safety and operational goals
	5.4	Outline the principles of equality, diversity and inclusion in the workplace
	5.5	Describe key communication techniques (including written), industry terminology and how to adapt style to audience
	5.6	Explain the importance of accurate records and key documentation
6. Know and understand how to select, inspect, maintain and store tools	6.1	Describe how to select hand tools according to their purpose and use
	6.2	Outline storage requirements and maintenance requirements for hand tools
7. Be able to contribute effectively to linesperson erector work activities	7.1	Review drawings, instructions and/or information to understand the task to be completed

	7.2	Review safety documentation to ensure correct towers / circuits are being accessed
	7.3	Prioritise and plan tasks, considering safety, environmental impact, quality and cost
	7.4	Select and organise resources to complete tasks on time
	7.5	Identify apparatus to be worked on
	7.6	Demonstrate how to communicate with others to give and receive information
	7.7	Demonstrate how to apply team working principles to be an active member of a working party
	7.8	Produce or amend documents including: <ul style="list-style-type: none"> • handover notes • procedures • reports
	7.9	Carry out and record planned and unplanned learning and development activities
	7.10	Make recommendations for improvements to work activities including reducing costs and driving efficiencies
	7.11	Demonstrate how to supervise a working party
	7.12	Demonstrate how to record information
	7.13	Follow procedures for working on or in proximity to live apparatus
	7.14	Communicate effectively with team members regarding access and egress procedures
8. Be able to use tools, resources and technology	8.1	Demonstrate how to select, check, prepare, use and store hand and power tools
	8.2	Demonstrate how to select, check, and prepare resources
	8.3	Demonstrate how to use digital and information technology, including how to follow cyber security requirements
	8.4	Demonstrate how to follow established protocols and manufacturer guidelines when operating tools to prevent accidents
	8.5	Demonstrate how to install access equipment

Range Statements:

Learning Outcome 1:

Functions include: generation, TNO, DNO, IDNO, ICP, supplier, generator and voltages at each stage of generation, transmission and distribution

Power industry regulations include: Electricity at Work Regulations; The Electricity Safety, Quality and Continuity Regulations (ESQCR); The Electricity Act 1989

Net zero strategy include: Principles of sustainability. Impact of sites of special scientific interest, flora and fauna on work. Potential effects on the environment of companies and individuals not complying with good environmental practices.

Learning Outcome 2:

Business operational considerations; include how activities impact on customers, financial constraints including budgets, penalties and rewards and ethical business practices

Learning Outcome 3:

Understand the different types of support structures depending upon route, weight of conductors, voltage and conductor material. The importance of using established construction and maintenance techniques including the construction of overhead lines and activity such as conductor, insulation and support structure replacement

Learning Outcome 4:

Information and digital technology include:

- Hardware; computers and mobile devices
- Software; email, word processing, databases, productivity and collaboration software, work and asset management systems

Regulatory requirements for use of IT and digital technology include General Data Protection Regulation (GDPR) and Cyber security.

Learning Outcome 7:

Drawings, instructions and/or information may include, for example: work instructions, design specifications, utility plans, on-line search documents, risk assessments and approved Codes of Practice as well as company procedures such as Distribution Safety Rules (DSRs) and industry-related guidance notes

Others include: colleagues, customers and stakeholders

Learning Outcome 8:

Access equipment includes platforms, ladders and spacer trollies

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment
-

EEA Unit Ref: 1711

Ofqual Unit Ref: K/652/1954

Unit Title: Undertake utility linesperson activities

Level: 3

Credit value: 7

GLH: 54

TQT: 68

Unit aim(s): This unit is designed to develop the learner’s underpinning knowledge and skills in activities undertaken by a Linesperson Erector, including earthing procedures, rigging and slinging techniques and the core activities required to maintain and repair plant and equipment.

Assessment Requirements: Portfolio of Evidence

Relationship to industry standards and frameworks: This unit aligns with the Occupational Profile for Overhead Lines LE3 and the core elements of the Power Industry Overhead Linesperson apprenticeship standard.

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand the appropriate earthing procedures	1.1 Outline the purpose and importance of earthing in electrical systems
	1.2 Describe the procedures for earthing and bonding of electrical equipment, including high voltage temporary earthing requirements
	1.3 Explain the safety implications of inadequate earthing
2. Know and understand the transmission rigging techniques on conductors and transmission towers	2.1 Describe the principles of rigging
	2.2 Outline safe practices for rigging operations
	2.3 Describe safe use of lifting ropes and knots
3. Know and understand the rigging and slinging principles for overhead lines activities	3.1 Outline safe practices for slinging operations
	3.2 Outline the role and responsibilities of a slinger / signaller
	3.3 Describe the principles of rigging and slinging
4. Be able to undertake pre-use checks of plant and equipment	4.1 Demonstrate how to undertake pre-use checks on plant and equipment
	4.2 Record findings of pre-use checks and report any issues according to organisational procedures
	4.3 Check overhead line plant and apparatus is safe to access, install flag and check wristlets if required
5. Be able to set up safe working zones at ground level	5.1 Set-up safe working zones by clearly marking boundaries and identifying hazards
	5.2 Demonstrate how to use signage and barriers to delineate safe zones and restrict access
6. Be able to install tower demarcation as per safety documentation	6.1 Demonstrate how to follow safety documentation to correctly install tower demarcation equipment
	6.2 Show how to check that demarcation is visible and effective in preventing access to live equipment
7. Be able to apply and remove earthing equipment	7.1 Follow procedures for installing and removing earthing equipment safely

	7.2	Demonstrate how to check that earthing equipment is functioning properly before and after use
8. Be able to demonstrate safe transmission rigging and slinging techniques on conductors and transmission towers	8.1	Carry out rigging and slinging tasks following industry best practices and safety guidelines
	8.2	Demonstrate how to tie various knots used in rigging applications
	8.3	Select and operate lifting equipment in overhead lines transmission work
9. Be able to undertake engineering activities on conductors	9.1	Demonstrate how to install and replace conductors and ancillary equipment
	9.2	Demonstrate how to carry out conductor compression jointing
	9.3	Demonstrate how to connect spacers to conductors
	9.4	Demonstrate how to test compression joints
10. Be able to remove overhead lines fittings	10.1	Demonstrate how to remove and replace overhead line fittings including dampers and shoes
	10.2	Demonstrate how to follow manufacturer guidelines, organisational procedures and safety documentation during the replacement process
	10.3	Demonstrate how to conduct post-replacement inspections to ensure fittings are secure and functioning properly
11. Be able to replace both tension and suspension insulators	11.1	Follow company procedures for the safe removal and replacement of tension and suspension insulators
	11.2	Carry out checks to ensure that replaced insulators are installed correctly and are functioning properly
12. Be able to replace spacers in overhead line systems	12.1	Demonstrate how to remove and replace spacers in overhead lines systems by following organisational procedures
	12.2	Carry out inspections of replaced spacers to ensure they meet safety and operational standards

Range Statements:

Learning Outcome 1:

Electrical equipment: Conductors; Towers and structures; Plant and associated apparatus

Safety implications: Electric shock; Induced voltage; Equipment damage; Risk to personnel

Learning Outcome 2:

Principles of rigging: Load distribution; Mechanical advantage; Stability and control;

Lifting ropes and knots may include: Synthetic and fibre ropes; Common knots used in lifting and securing

Learning Outcome 3:

Slinging, to include load calculations and safety factors including weights and tensions, use of drain earths to limit induced current at point of work. Load control procedures including suspended loads and their safe and efficient control.

Learning Outcome 4:

Pre-use checks: Visual inspection; Functional checks; Identification of defects

Learning Outcome 6:

Safety documentation: Risk assessments; Method statements; Permits to work

Learning Outcome 8:

Various knots: Bowline, Running bowline, Clove hitch, Round turn and two half hitches, Figure of eight, Timber hitch, Rolling hitch

Lifting equipment: Winches; Blocks and pulleys; Slings and shackles

Learning Outcome 12:

Safety and operational standards: Industry standards; Company requirements; Safe working practices

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment

EEA Unit Ref:	1712
Ofqual Unit Ref:	L/652/1955
Unit Title:	Contribute effectively to replacement of overhead line towers, conductors, insulators and fittings as a Linesperson Erector 3
Level:	3
Credit value:	8
GLH:	58
TQT:	78
Unit aim(s):	The aim of this unit is designed to develop the learner's ability to contribute effectively to OHL operations taking account of planning, safe execution and reference to legislative and asset owner requirements and guidance
Assessment Requirements:	Portfolio of Evidence
Relationship to industry standards and frameworks:	This unit aligns with the Occupational Profile for Overhead Lines LE3 and the core elements of the Power Industry Overhead Linesperson apprenticeship standard.

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand tension stringing techniques	1.1 Outline the principles and objectives of tension stringing techniques used in overhead line construction and maintenance
	1.2 Describe the functions and safety considerations of key equipment and tools commonly used in tension stringing operations
	1.3 Explain the purpose and importance of earthing in tension stringing operations to prevent electrical hazards
	1.4 Outline the specific earthing procedures that must be followed during tension stringing, including the selection and placement of earthing equipment
	1.5 Describe the risks associated with inadequate earthing and the potential consequences for personnel and equipment
	1.6 Outline the safety considerations associated with tension stringing techniques
2. Know and understand the techniques involved in jointing conductors	2.1 Describe the techniques involved in jointing conductors
	2.2 Outline the specific tools and equipment used in jointing conductors
3. Know and understand the machine site requirements	3.1 Describe the layout and specific features of the machine site
	3.2 Outline the importance of Equipotential Zones (EPZ) and their regulations in relation to site activities
	3.3 Identify potential environmental impacts associated with machine operations and measures to mitigate them
	3.4 Outline site-specific safety protocols and emergency procedures relevant to machine operations and EPZ compliance
4. Know and understand replacement activities associated with overhead lines	4.1 Outline the steps involved in the tower steelwork replacement process
	4.2 Describe safety measures associated with tower steelwork replacement activities
	4.3 Outline basic techniques for repairing and replacing barbed wire and tower furniture
5. Know and understand the key technical drawings used in overhead lines activities	5.1 Identify the key technical drawings used in overhead lines activities
	5.2 Explain why technical drawings are used
6. Be able to contribute to the jointing of conductors	6.1 Follow instructions to assist in the safe jointing of conductors
	6.2 Prepare the work area to ensure it is clean and free from hazards before starting jointing procedures

	6.3	Demonstrate how to handle equipment and materials correctly and safely under supervision
7. Be able to contribute to the installation and removal of tension insulator access platforms	7.1	Support colleagues in the setup and dismantling of tension insulator access platforms
	7.2	Demonstrate how to install rigging equipment at designated locations as directed by team members
	7.3	Check that the access platform is stable and secure before use, following organisational procedures
8. Be able to contribute to tower steelwork replacement	8.1	Prepare and organise tools and materials required for tower steelwork replacement
	8.2	Demonstrate how to install rigging equipment at designated locations as directed by team members
	8.3	Demonstrate how to lift and position steel components using proper techniques, under supervision
9. Be able to contribute effectively to replacement of conductors using tension stringing techniques	9.1	Demonstrate how to support team members in the preparation and execution of conductor replacement using tension stringing techniques
	9.2	Demonstrate how to use the tools and equipment used in tension stringing
	9.3	Demonstrate how to secure and handle conductors safely during the replacement process
10. Be able to replace and repair barbed wire and tower furniture	10.1	Demonstrate how to remove and install barbed wire and tower furniture, under supervision

Range Statements:

Learning Outcome 1:

Key equipment and tools: pullers, tensioners, drum stands, running blocks, anti-twist devices, swivels, winches, rope systems, earthing equipment, communication devices, and associated hand tools.

Learning Outcome 3:

Features: access and egress points, machine positions, conductor running areas, exclusion zones, anchor points, storage areas, hazard zones, and working boundaries.

Environmental impacts: noise, emissions, fuel or oil spillages, waste generation, damage to vegetation, ground disturbance, and impact on watercourses or surrounding land.

Learning Outcome 5:

Technical drawings: route plans, tower configuration drawings, foundation drawings, steelwork assembly drawings, conductor layout drawings, and site-specific work drawings.

Learning Outcome 8:

Tools and materials: rigging equipment, lifting accessories, hand tools, fixings, steel members, bolts, washers, and replacement components.

Learning Outcome 9:

Tools and equipment: pullers, tensioners, drum stands, running blocks, ropes, grips, earthing equipment, and communication devices.

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment
-

EEA Unit Ref:	1713
Ofqual Unit Ref:	M/652/1956
Unit Title:	Preparing to undertake activities on overhead lines as a Linesperson Erector 2
Level:	3
Credit value:	5
GLH:	32
TQT:	48
Unit aim(s)	The aim of this unit is to develop the learner's ability to know and understand the technical aspects of planning and executing OHL work activities
Assessment Requirements:	Portfolio of Evidence
Relationship to industry standards and frameworks:	This unit aligns with the Occupational Profile for Overhead Lines LE2

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand the importance of effective tension stringing techniques	1.1 Describe the factors which influence tension stringing, including: <ul style="list-style-type: none"> • Conductor type • Environmental conditions • Load calculations
	1.2 Explain the importance of proper planning and execution of tension stringing to ensure safety and efficiency
	1.3 Outline the roles of key team members during the tension stringing process
	1.4 Outline the tools and equipment used in tension stringing operations, including their functions and safety considerations
	1.5 Identify the risks associated with inadequate earthing and the potential consequences for personnel and equipment
2. Know and understand the importance of technical drawings	2.1 Describe the purpose and importance of technical drawings for construction and maintenance activities
	2.2 Explain the role of technical drawings in ensuring compliance with safety standards and regulations during project execution
	2.3 Describe how to read and interpret technical drawings
3. Know and understand different winching techniques	3.1 Describe the principles of winching techniques
	3.2 Outline different types of winches used in the industry and their specific functions
	3.3 Describe the safety considerations and best practices for operating winches
4. Know and understand the range of plant equipment used in overhead lines activities	4.1 Describe the range of plant equipment used in overhead lines activities
	4.2 Outline the operational principles and safety features of each type of plant equipment
	4.3 Describe inspection procedures for plant equipment to ensure safe and efficient operations
	4.4 Outline the importance of following manufacturer guidelines and company policies when operating and maintaining plant equipment
	4.5 Carry out inspection procedures for plant equipment

5. Be able to assist with machine site and EPZ set up requirements	5.1	Assess potential environmental impacts associated with machine operations
	5.2	Follow site-specific safety protocols related to machine operations and EPZ compliance
	5.3	Follow detailed instructions from others to assist in the jointing of conductors, ensuring adherence to safety protocols
	5.4	Prepare the work area by organising tools and materials , ensuring necessary equipment is in good working condition
	5.5	Prepare conductors for safe operation including: <ul style="list-style-type: none"> • Cleaning • Aligning • Securing for jointing
6. Be able to understand technical drawings	6.1	Identify and select technical drawings required for the task
	6.2	Read and interpret technical drawings accurately, including understanding symbols, scales, and annotations

Range Statements:

Learning Outcome 1:

Factors: Conductor type (e.g. ACSR, AAAC); Environmental conditions (e.g. wind, temperature, weather conditions); Load calculations (e.g. span length, sag, tension limits, weight); Terrain and ground conditions

Tools and equipment: Pullers and tensioners; Drum stands and reels; Running blocks and sheaves; Ropes, grips and swivels; Communication devices

Risks associated with inadequate earthing: Induced voltages; Stored electrical energy; Contact with live or adjacent circuits; Damage to equipment; Injury to personnel

Learning Outcome 2:

Technical drawings: Layout drawings; Schematic diagrams; Construction drawings; Equipment or component drawings

Learning Outcome 3:

Types of winches: Manual winches; Hydraulic winches; Mechanical winches; Capstan winches

Principles to include the mechanics of winches and their applications in lifting operations

Safety considerations and best practices for operating winches: Load limits and safe working loads (SWL); Equipment inspection and maintenance requirements; Secure anchoring and positioning; Communication between team members; Use of exclusion zones

Learning Outcome 4:

Plant equipment: Excavators; Cranes; Mobile Elevating Work Platforms (MEWPs); Winching equipment; Vehicles and trailers

Inspection procedures: Pre-use checks; Visual inspection for damage or wear; Functional checks; Reporting and recording defects

Learning Outcome 5:

Environmental impacts: Noise and vibration; Emissions and fuel use; Ground disturbance; Waste generation; Impact on vegetation, wildlife and surrounding land

Site-specific safety protocols: Risk assessments and method statements; Permit-to-work systems; Equipotential Zone (EPZ) requirements; Use of personal protective equipment (PPE); Emergency procedures

Tools and materials: Hand tools; Jointing equipment; Conductors and associated materials; Fixings and consumables

Learning Outcome 6:

Technical drawings: Site layout drawings; Conductor routing drawings; Assembly or installation drawings

Symbols, scales and annotations: Electrical symbols; Measurement scales; Labels and annotations

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment
-

EEA Unit Ref:	1714
Ofqual Unit Ref:	R/652/1957
Unit Title:	Undertake activities on overhead lines as a Linesperson Erector 2
Level:	3
Credit value:	8
GLH:	60
TQT:	78
Unit aim(s):	This unit is aimed at developing the learner's understanding of work associated with steel towers, associated equipment, techniques and safety procedures.
Assessment Requirements:	Portfolio of Evidence
Relationship to industry standards and frameworks:	This unit aligns with the Occupational Profile for Overhead Lines LE2

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand the importance of communication during tower steelwork replacement activities	1.1 Explain the importance of teamwork and communication during steelwork replacement activities
2. Know and understand tower erection	2.1 Describe the steps involved to assist with tower erection
	2.2 Explain the importance of teamwork and communication during tower erection operations
3. Know and understand cradle blocking techniques	3.1 Describe the basic techniques involved in cradle blocking
	3.2 Outline the proper positioning and securing of equipment for cradle blocking
4. Be able to assist with cradle blocking techniques	4.1 Support team members in carrying out cradle blocking techniques, following established safety protocols
	4.2 Demonstrate how to prepare the work area, including selecting appropriate tools and equipment for cradle blocking operations
5. Be able to assist with tower erection	5.1 Prepare and organise tools and materials needed for tower erection
	5.2 Follow safety guidelines and instructions from others while assisting in the tower erection process, including proper lifting and rigging techniques
	5.3 Demonstrate how to safely position and secure rigging equipment under supervision
6. Be able to assist with the jointing of conductor's	6.1 Support team members to apply correct techniques safely during the jointing of conductors
	6.2 Demonstrate use of tools and equipment required during jointing
7. Be able to assist with the installation and removal of tension insulator access platforms	7.1 Demonstrate installation and removal of tension insulator access platforms
	7.2 Follow safety guidelines and instructions from others whilst assisting with the installation and removal process
8. Be able to assist with tower steelwork replacement	8.1 Support team members to prepare and organise tools and materials required for tower steelwork replacement
	8.2 Follow safety guidelines and instructions from others while assisting in the replacement process

	8.3 Support team members with the lifting and positioning of steel components , ensuring that all safety measures are observed
9. Be able to assist with the replacement and repair of barbed wire and tower furniture	9.1 Follow safety guidelines while handling barbed wire and other materials, including the use of appropriate Personal Protective Equipment (PPE)
	9.2 Demonstrate repairing and replacing barbed wire and tower furniture

Range Statements:

Learning Outcome 1

Teamwork and communication: Verbal communication (e.g. briefings, instructions, hand signals); Non-verbal communication (e.g. gestures, visual signals); Use of communication devices (e.g. radios); Coordination between team members during operations

Learning Outcome 2

Steps involved: Preparation of work area; Assembly of components; Positioning and alignment of tower sections; Securing and fixing components; Final checks and completion activities

Learning Outcome 3

Basic techniques: Positioning of blocking equipment; Securing loads; Use of appropriate support methods; Maintaining stability during operations

Positioning and securing of equipment: Correct placement of equipment in relation to the structure; Use of fixings and restraints; Ensuring stability and load distribution; Checking security prior to use

Learning Outcome 4

Safety protocols: Risk assessments and method statements; Use of personal protective equipment (PPE); Following site safety rules and procedures; Communication of hazards and risks

Tools and equipment: Hand tools; Lifting and supporting equipment; Fixing and securing equipment

Learning Outcome 5

Lifting and rigging techniques: Manual handling techniques; Use of lifting equipment; Securing loads; Maintaining balance and control

Rigging equipment: Slings; Shackles; Hooks; Chains and lifting accessories

Learning Outcome 7

Installation and removal: Positioning of access platforms; Securing platforms in place; Dismantling and removal procedures

Learning Outcome 8

Lifting and positioning of steel components: Manual handling techniques; Use of lifting equipment; Positioning and alignment; Securing components safely

Learning Outcome 9

Personal Protective Equipment (PPE): Gloves; Eye protection; Protective clothing; Safety footwear

Barbed wire and tower furniture: Barbed wire; Anti-climbing devices; Signs and fittings; Tower attachments and accessories

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment

EEA Unit Ref: 1715

Ofqual Unit Ref: T/652/1958

Unit Title: Plan, prepare and lead overhead line work activities as a
Linesperson Erector 1

Level: 3

Credit value: 5

GLH: 34

TQT: 46

Unit aim(s): This unit is designed to develop the learner's ability to plan and
prepare for OHL work activity including giving an
understanding of planning techniques and relevant legislation

Assessment Requirements: Portfolio of Evidence

Relationship to industry standards and frameworks: This unit aligns with the Occupational Profile for Overhead Lines
standards and frameworks: LE1

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand relevant safety rules	1.1 Describe the safety rules applicable to the role including the regulations and guidelines to be followed
	1.2 Explain the importance of compliance with safety rules to prevent accidents and maintain a safe working environment
	1.3 Outline the procedures for forming a working party
	1.4 Describe the roles of working party members in maintaining safety and compliance
2. Know and understand the machine site and EPZ set up requirements	2.1 Describe the specific requirements for setting up a machine site applicable to the role
	2.2 Explain the importance of Equipotential Zones (EPZ) and their regulations in relation to site activities
	2.3 Describe the types of signage, barriers and safety equipment required for effective site setup
	2.4 Explain company policies during the site setup process to maintain safety and environmental standards
3. Know and understand earthing procedures	3.1 Explain company policies relating to earthing procedures in tension stringing activities including documentation and compliance checks
	3.2 Describe specific earthing procedures to be followed in various operational contexts to ensure safety
	3.3 Explain the measures to be taken to mitigate risks associated with inadequate earthing
4. Know and understand planning, scheduling and time management techniques	4.1 Describe the principles of effective planning and prioritisation to ensure that tasks are completed efficiently and safely
	4.2 Explain work scheduling techniques to optimise workflow and resource allocation for the team
	4.3 Explain the importance of time management to meet project deadlines and maintain productivity
	4.4 Describe how to monitor progress and adjust plans to accommodate changes in workload or priorities

5. Know and understand training and certification requirements for personnel	5.1	Explain the importance of training and certification for personnel involved in winching operations to ensure safety and compliance
	5.2	Identify additional training and certification requirements which personnel must have to undertake overhead line activities
6. Know and understand technical drawings relevant to role	6.1	Describe the role of technical drawings in ensuring compliance with safety standards and regulations during project execution
	6.2	Explain what quality checks are required on technical drawings
7. Be able to lead team members in conducting site-specific risk assessments	7.1	Lead the process of conducting site-specific risk assessments, identifying potential hazards and evaluating risks associated with the work environment
	7.2	Facilitate team members in the risk assessment process, encouraging input and collaboration to ensure comprehensive evaluations
	7.3	Develop and implement control measures to mitigate identified risks
	7.4	Ensure team members are aware of control measures
	7.5	Review and update risk assessments as required
8. Be able to lead team members in using technical drawings	8.1	Brief team members based on technical drawings
	8.2	Undertake quality checks on technical drawings and make revisions where required

Range Statements:

Learning Outcome 1

Regulations and guidelines: Health and safety legislation; Industry standards and codes of practice; Employer policies and procedures

Learning Outcome 2

Signage, barriers and safety equipment: Warning signs; Physical barriers and fencing

Cones and demarcation systems; Safety equipment relevant to the activity

Learning Outcome 3

Earthing procedures: Application of earthing equipment; Bonding and grounding techniques; Isolation and discharge of stored energy

Learning Outcome 5

Training and certification: Role-specific training; Safety training; Equipment-specific certification

Additional training and certification requirements: Authorisations required by asset owners; Competency requirements for specific activities; Refresher or updated training

Learning Outcome 6

Technical drawings: Design drawings; Construction drawings; Layout or schematic drawings

Learning Outcome 7

Control measures: Use of PPE; Safe systems of work; Barriers and exclusion zones; Supervision and monitoring

Learning Outcome 8

Quality checks: Accuracy of information; Compliance with specifications; Approval status of drawings

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment
-

EEA Unit Ref: 1716

Ofqual Unit Ref: Y/652/1959

Unit Title: Lead activities on overhead lines as a Linesperson Erector 1

Level: 3

Credit value: 10

GLH: 76

TQT: 98

Unit aim(s): This unit develops the learner's ability to lead and supervise overhead line activities, ensuring safe and effective operations. It covers leadership and performance management techniques, the coordination of team activities, and the safe use of plant and equipment. Learners will be able to monitor work practices, support team members, and ensure compliance with safety procedures, company policies, and industry standards across a range of overhead line operations.

Assessment Requirements: Portfolio of Evidence

Relationship to industry standards and frameworks: This unit aligns with the Occupational Profile for Overhead Lines LE1

Learning Outcome: The learner will:	Assessment Criteria: The learner can:
1. Know and understand leadership, supervision and mentoring techniques	1.1 Outline the key principles of effective leadership and supervision
	1.2 Explain the importance of providing clear direction and support to team members
	1.3 Describe techniques to evaluate team performance and provide constructive feedback to promote continuous improvement
2. Be able to undertake and supervise machine site and EPZ set up requirements	2.1 Follow company policies during the setup process to ensure compliance and maintain safety and environmental standards
3. Be able to lead team members and monitor the use of plant equipment used in overhead lines activities	3.1 Monitor the winching operations, including the use of winching equipment by team members, ensuring that all safety protocols are followed
	3.2 Provide support and direction to team members on winching operations and the use of winching equipment
	3.3 Supervise the pre-use inspections of winching equipment before operation
	3.4 Operate plant as per manufacturer recommendations and training, ensuring that all safety measures and guidelines are followed
	3.5 Supervise the inspections and maintenance checks on plant equipment to ensure it is safe and functional
	3.6 Monitor the use of plant equipment on site by team members, addressing safety concerns or operational issues
4. Be able to conduct and lead team members in safety practices	4.1 Follow the procedures for reporting safety incidents and near misses
	4.2 Ensure team members adhere to safety rules , fostering a culture of safety within the team
5. Be able to undertake and supervise team members with earthing procedures for tension stringing techniques	5.1 Follow company policies related to earthing procedures in tension stringing activities, including documentation and compliance checks
	5.2 Monitor team members following earthing procedures to ensure they maintain safety during operations
6. Be able to manage workloads and undertake performance evaluation	6.1 Implement strategies to monitor workload progress
	6.2 Adapt plans to accommodate changes in workload or priorities

	6.3 Promote a positive and productive work environment for team members
	6.4 Implement techniques to evaluate team performance
	6.5 Provide constructive feedback to team members to promote continuous improvement
7. Be able to lead team members in jointing conductor's procedures	7.1 Monitor the jointing process, ensuring that safety protocols and procedures are followed by the team
	7.2 Provide instructions and guidance to team members on the correct techniques and tools to be used during jointing
	7.3 Monitor the quality of work being performed, ensuring compliance with industry standards and specifications
	7.4 Facilitate communication among team members to address issues or questions that arise during the jointing process
8. Be able to lead team members in installing and removing of tension insulator access platforms	8.1 Coordinate the installation and removal of tension insulator access platforms
	8.2 Ensure safety measures are in place during the installation and removal of tension insulator access platforms
	8.3 Assign tasks to team members based on their skills and experience, promoting efficiency and safety
	8.4 Conduct pre-use checks of the access platform to ensure it is safe and compliant with regulations
	8.5 Supervise the work being performed, providing support and guidance as needed
9. Be able to lead team members in replacing tower steelwork	9.1 Plan and oversee the replacement of tower steelwork, ensuring compliance with safety protocols and procedures
	9.2 Carry out site assessments to determine the best approach for steelwork replacement
	9.3 Assign roles and responsibilities to team members
	9.4 Ensure everyone understands their tasks and the importance of safety
	9.5 Monitor the progress of the replacement work
	9.6 Provide feedback and support to team members as needed
10. Be able to lead team members in the replacement of conductor using tension techniques	10.1 Monitor the conductor replacement process, ensuring that tension stringing techniques are applied correctly and safely

	10.2 Provide guidance to team members on the correct use of equipment and techniques involved in tension stringing
	10.3 Conduct pre-operation checks to ensure that equipment is in safe working conditions before starting the replacement process
	10.4 Facilitate communication among team members to ensure that everyone is aware of their roles and responsibilities during the operation
11. Be able to lead team members in the replacement and repair of barbed wire and tower furniture	11.1 Lead the team in the safe removal and installation of barbed wire and tower furniture, ensuring compliance with safety regulations
	11.2 Provide clear instructions to team members on the techniques and tools required for the replacement and repair tasks
	11.3 Monitor the quality of work being performed, ensuring installations comply with safety and operational standards
	11.4 Respond to issues or concerns raised by team members during the replacement and repair process
12. Be able to lead team members carrying out cradle blocking techniques	12.1 Oversee the execution of cradle blocking techniques, ensuring that all safety protocols are adhered to during the process
	12.2 Provide clear instructions and guidance to team members on the correct techniques and equipment to be used
	12.3 Monitor the work being performed, ensuring that cradle blocking is carried out effectively and safely
	12.4 Facilitate communication among team members to address issues or questions that arise during the blocking process
13. Be able to lead team members on tower erection	13.1 Plan and oversee the tower erection process, ensuring compliance with safety measures and procedures
	13.2 Assign specific tasks to team members based on their skills and experience, promoting efficiency and safety
	13.3 Carry out site assessments to determine the best approach for tower erection, considering factors such as weather and site conditions

13.4 Monitor the progress of the tower erection, providing feedback and support to team members as needed

Range Statements:

Learning Outcome 1

key principles of effective leadership and supervision: Effective leadership and supervision means leading the team clearly, safely and professionally. This includes giving clear instructions, supporting team members, monitoring work, making sure safety rules are followed, and helping the team complete the job to the required standard.

Learning Outcome 3

Winching equipment: Winches (manual, hydraulic, mechanical); Ropes and cables; Pulleys and blocks

Plant equipment: Winches; Vehicles; Lifting equipment

Learning Outcome 4

Safety rules: Site safety procedures; Use of PPE; Compliance with signage and instructions

Learning Outcome 5

Earthing procedures: Application of earthing equipment; Bonding and grounding; Isolation of energy sources

Learning Outcome 7

Industry standards and specifications: Manufacturer specifications; Industry guidance; Organisational procedures

Learning Outcome 9

Site assessments: Evaluation of site conditions; Identification of hazards; Access and egress considerations

Learning Outcome 10

Equipment and techniques: Tensioning equipment; Pulling equipment; Handling techniques

Learning Outcome 13

Site assessments: Evaluation of site layout; Identification of hazards; Access considerations

Factors: Weather conditions; Ground conditions; Environmental constraints

Evidence Guidance:

A list of suitable evidence types for use within the learner's Portfolio of Evidence is included in the specification, this list is not exhaustive but is designed to provide an indication of what may be used as acceptable sources of evidence. Some sources of evidence will be more relevant to the unit content and the assessment of the learner's skills and/or knowledge than others.

It is a requirement that workplace evidence is used where possible.

For this unit, Energy & Environment Awards also allows assessment:-

- ✓ In a Realistic Work Environment
-

4. Awarding

Grading

In order to achieve the qualifications listed in this Qualification Specification, learners must “pass” each of the units which comprise the specific qualification. Assessment decisions will be subject to internal and external quality assurance.

Certification

Energy & Environment Awards issues a qualification certificate of achievement for each qualification that has been achieved by the learner.

Energy & Environment Awards offers learners an electronic certificate available to the Centre to download from Quartzweb, following the processing of a successful claim, or a physical certificate by exception and at an additional cost, which will be sent directly to the registered Centre. Learners who do not achieve the full qualification, but who have successfully achieved individual unit(s) will be able to receive an electronic unit certificate.

The date of certification is based on the achievement of the final unit.

5. Energy & Environment Awards Policies

Energy & Environment Awards has published comprehensive policies, which are made available to approved Centres and learners on the Energy & Environment Awards Qualifications website at: <https://energyenvironmentawards.co.uk/policies-and-fees/>

Contact Us

Please do not hesitate to contact the Energy & Environment Awards Service Delivery team for any query relating to the delivery, assessment, quality assurance or certification of these qualifications.

Telephone: 0121 713 8310, Option 2

Email: enquiries@energyenvironmentawards.co.uk

© **Energy & Environment Awards**

All rights reserved. No part of this publication may be reproduced, stored in a retrievable system, or transmitted in any form or by any means whatsoever without prior written permission from the copyright holder.
www.energyenvironmentawards.co.uk