



Australian Government

UEEFS2003 Work safely and sustainably in the energy sector

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Modification History

Release	Comments
1	This unit of competency was first released in UEE Electrotechnology Training Package Release 10.0.

Unit outcomes

This unit introduces learners to safe and sustainable work practices in the energy sector, with a focus on identifying hazards, following safety procedures, and applying environmental sustainability practices.

It supports the development of foundation and employability skills, preparing learners for further vocational training, apprenticeships, or employment in the energy sector.

On completion of this unit, learners will be able to demonstrate basic knowledge of work health and safety requirements, common hazards, electrical and environmental risks, emergency procedures and sustainable work practices relevant to supervised energy sector environments. They will have the skills to follow instructions, use appropriate personal protective equipment (PPE), report hazards and safety concerns, respond to safety information provided through briefings and inductions and apply basic shut-down and isolation procedures in accordance with task requirements.

Licensing/Regulatory Information

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Knowledge

On successful completion of this unit, learners will have:

- basic factual knowledge of:
 - work health and safety responsibilities relevant to entry-level energy sector contexts
 - common hazards and electrical risks
 - safety signage, symbols and documents used in energy sector contexts
- basic technical knowledge of:
 - safe work procedures
 - the correct use of personal protective equipment (PPE)
 - the need to follow manufacturer guidelines when working with energy-related systems or equipment

- safety principles that apply when working with extra-low voltage (ELV) direct current (d.c.) model energy systems
- basic procedural knowledge of:
 - sustainable work practices
 - emergency response procedures
 - communication protocols for reporting hazards, incidents, and safety concerns using verbal, written, or digital methods.

Skills

On successful completion of this unit, learners will have:

- cognitive skills to:
 - recognise hazards
 - follow instructions
 - act on basic safety and sustainability information relevant to energy sector environments
- technical skills to:
 - select and use a limited range of PPE
 - apply basic safe work procedures
 - respond to simulated emergency situations
 - apply shut-down procedures
 - confirm isolation for tasks involving known energy-related risks
- communication skills to:
 - report hazards, incidents and safety concerns
 - clarify safety instructions when responding to safety briefings and supervised induction activities
 - use verbal, written, or digital methods appropriately.

Application of Knowledge & Skills

Learners will apply their knowledge and skills in a structured learning environment. They will use autonomy and limited judgement to:

- follow safe work practices and demonstrate environmentally responsible behaviours relevant to energy sector contexts
- communicate safety concerns using appropriate methods
- identify and report hazards or incidents
- use appropriate PPE

- follow site-specific safety information and seek clarification
- respond to simulated emergency situations
- apply sustainable work practices
- confirm isolation before work on electrical systems in accordance with task requirements.

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

Foundational Skills

Unit sector(s)

Electrotechnology

Range of conditions

N/A

Assessment Requirements for UEEFS2003 Work safely and sustainably in the energy sector

Performance Evidence

The individual must demonstrate the ability to:

- follow basic safe work procedures in a supervised environment, including selecting and using appropriate PPE for tasks involving electrical or energy-related risks
- identify and report simulated electrical hazards using appropriate methods, including verbal, written, or digital reporting methods where required, and act within scope of own role to minimise risk
- respond to a simulated emergency involving an energy-related risk by following standard procedures
- apply sustainable work practices to minimise waste, reduce energy use, and handle energy sector materials in an environmentally responsible manner
- follow directions provided in safety briefings and clarify safety information
- follow instructions, demonstrate safe behaviour and show awareness of site-specific requirements relevant to energy sector environments
- confirm isolation before working on electrical systems by following instructions and applying shut-down and isolation procedures.

Knowledge Evidence

The individual must demonstrate knowledge of:

- work health and safety (WHS) responsibilities of learners in supervised energy sector learning environments, including:
 - following instructions
 - participating in safety briefings
 - using equipment and PPE correctly
 - reporting hazards, incidents, or unsafe behaviour
- workplace hazards in energy sector settings relevant to course project work, including:
 - electrical risks
 - slips, trips, and falls
 - equipment-related hazards, including ladders
 - stored energy and alternative energy supplies
 - environmental conditions
 - optical hazards relevant to course project work including light-emitting diode (LED) and laser safety

- the purpose and selection of PPE for energy-related tasks relating to course project work, including:
 - electrical-rated gloves
 - arc-rated clothing
 - safety boots with insulation
 - eye and hearing protection
 - high-visibility clothing
 - hard hats
- procedures for responding to energy-related incidents and emergency situations in learning environments, including:
 - alerting a supervisor
 - evacuating according to site procedures
 - emergency stop mechanisms or isolation switches
- safety principles when working with ELV d.c. model energy systems, including:
 - identifying d.c. voltage levels
 - correct voltage selection for components and systems
 - checking for damage and exposed conductors before use
 - following shut down and isolation procedures
 - confirming isolation before connecting and disconnecting energy system components
 - connecting components correctly, including ensuring polarity
 - using appropriate tools and PPE
 - keeping work areas dry and organised
 - electrostatic discharge (ESD) precautions when handling sensitive electronic components
- sustainable work practices that minimise environmental impact, including:
 - efficient use of energy and resources
 - reducing, reusing, or recycling waste
 - correct disposal of e-waste and batteries
- common safety signage, symbols, and documents used in energy sector environments, including:
 - hazard and warning signs
 - site induction checklists, safety reporting, and emergency procedures
 - risk control documents including Safe Work Method Statements (SWMS) and Job Safety Analyses (JSA)

- communication methods for reporting hazards and raising safety concerns in a supervised environment, including:
 - verbal reports
 - written forms
 - digital devices
 - toolbox talks
- the role of inductions, safety briefings, and toolbox talks in providing site information, reinforcing expectations, and clarifying risks.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

All practical activities and projects involving electrical components must be limited to ELV d.c. systems as defined by relevant jurisdictional standards, to ensure tasks can be safely delivered and undertaken by individuals who do not require an electrical licence.

Mandatory Workplace Requirements

There are no mandatory workplace requirements for assessment. Assessment of performance evidence may be in a structured learning environment.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
	Newly created	This unit has been created to address a skill or task required by industry that is not covered by an existing unit of competency

Links

Companion volumes, including implementation guides, are found on the national training register - <https://training.gov.au/training/details/UEE>.