

1. Module details**Module name****Powerline Safety Practices****Module duration**

It is expected that students with the appropriate entry knowledge and skills will successfully complete this module in 36 - 40 hours.

Module code

NUE207

Discipline code

0703130

2. Module purpose

This module provides knowledge and skills in safe working practices required specifically for powerline workers. The module covers the correct procedure and use of safety apparatus for climbing and working aloft, the correct use and maintenance of ladders, rescue procedures, traffic management and small fire control. All these areas are conducted and referenced to OH&S and enterprise standards and instructions.

3. Prerequisites

NBB002 Occupational Health & Safety.

4. Relationship to competency standards

This module addresses all Units of the E.S.I. National Competency Standards for Overhead Line Work and Cable Jointing, that call on traffic control and rescue and worksite safety.

5. Content**Protective apparatus and apparel for linework**

types
belts and harnesses
proper use
maintenance

Use of ladders

types
maintenance
carrying and erecting
clearances from live conductors

Climbing and working aloft

safety clearances
procedures
body belts
pole chairs
pre inspection of poles

Traffic management

purpose
lineworker responsibilities
procedures

operation of road signs and devices
 guidance signals
 responsibilities of traffic controller
 use of radio communication

Small fire control

extinguishing mediums
 precautions
 select and operate portable extinguishers

Rescue procedures

from pole top
 from switchboard
 from tower
 from pit

6. Assessment strategy

Assessment methods

Short answer questions (written, oral or graphic or computer based).
 Suitable practical exercises which assess the skills required of each learning outcome.

Conditions of assessment

Theory room for written tests and suitable field location for practical observation.

7. Learning outcome details

Learning outcome 1

Identify the items of protective apparatus and apparel used by lineworkers and state their applications.

Assessment criteria

- 1.1 Describe the conditions of employment relating to the use of protective apparel.
- 1.2 Identify items of protective apparatus and apparel required to be used by lineworkers and list the maintenance requirements.

Learning outcome 2

Carry, erect, collapse and lower an extension ladder and identify the maintenance requirements for wood and fiberglass ladders.

Assessment criteria

- 2.1 Carry an extension ladder and erect it against a standing pole.
- 2.2 Collapse and lower an extension ladder from a standing pole.
- 2.3 Describe the procedure for inspecting wood and fiberglass ladders.
- 2.4 Visually inspect wood and fiberglass ladders for wear and damage.
- 2.5 Renew the extension rope of an extension ladder.
- 2.6 Describe safety issues relating to clearances from overhead conductors.

Learning outcome 3

Climb and work on an overhead structure.

Assessment criteria

- 3.1 Identify the methods used to determine a pole is safe to climb.
- 3.2 Identify the methods used to inspect a lineworkers body belt.
- 3.3 Use knots and hitches appropriate to the requirements of a lineworker.
- 3.4 Climb an overhead structure and fit a pole chair.

Learning outcome 4

Determine and demonstrate the procedure for establishing an effective road traffic management scheme.

Assessment criteria

- 4.1 State the purpose of traffic management in accordance with relevant statutory requirements.
- 4.2 Define the lineworkers responsibilities in accordance with relevant statutory and electricity supply industry requirements.
- 4.3 Determine and demonstrate the relevant procedure used to provide an effective traffic management scheme.
- 4.4 Demonstrate the effective use of a two-way radio.

Learning outcome 5	Identify and operate various mediums used to extinguish small fires.
Assessment criteria	<p>5.1 Identify the appropriate extinguishing mediums for various types of fires.</p> <p>5.2 Identify the precautions for personal protection when fighting small fires.</p> <p>5.3 Select and operate the appropriate portable fire extinguisher for a specific type of fire.</p>
Learning outcome 6	Perform rescue procedures for victims who become incapacitated.
Assessment criteria	<p>6.1 Identify the procedure for rescuing a person from heights.</p> <p>6.2 Rescue a person from heights.</p> <p>6.3 Identify the procedure to rescue a person from confined spaces.</p> <p>6.4 Rescue a person from confined spaces.</p>
8. Delivery of the module	
Delivery strategy	<p>Delivery strategies must be suitable for both theoretical and/or practical learning and module purpose. It is recommended that learning and assessment be facilitated in a holistic manner which may require a learning sequence other than indicated in the body of this module descriptor.</p>
Resource requirements	<p>Enterprise work manuals and standing instructions Relevant manufacturers' equipment manuals and spare parts manuals Appropriate wood and fibreglass extension ladder Ladder rope Lineworkers body belts/body harness Hand line ropes Pole chairs All necessary tools and equipment to complete tasks.</p>
Occupational health and safety requirements	<p>Students should be made aware of Occupational Health and Safety issues in all situations and be expected to demonstrate safe working practices at all times. Electrical safety must be emphasised.</p>