UETTDRCJ21 Lay ESI electrical cables

# Modification History

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| Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package. |

# Application

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| This unit involves the skills and knowledge required to lay electrical supply industry (ESI) electrical cables.  It includes the direct laying of cables in trenches, on trays/racks, in troughs and/or in conduit or ducts. It also includes cable pulling methods, pulling tensions, minimum bending radii, reduction of frictional forces, use of supporting plant (e.g. dynamometers, rigging and winches), working on fire rated cable (FRC), polyvinyl chloride (PVC), air conditioning (A/C) ducted systems and using plant and equipment for laying and sealing ESI electrical cables.  The application of the skills and knowledge described in this unit may require a licence to practice in the workplace.  Other conditions may apply under state and territory legislative and regulatory licencing requirements which must be confirmed prior to commencing this unit. |

# Pre-requisite Unit

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| Common Unit Group  UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace  UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications  UETTDREL11 Apply sustainable energy and environmental procedures  UETTDREL16 Working safely near live electrical apparatus |

# Competency Field

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| Cable Jointing |

# Unit Sector

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| Not applicable. |

# Elements and Performance Criteria

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| ELEMENTS | | PERFORMANCE CRITERIA | |
| Elements describe the essential outcomes. | | Performance criteria describe the performance needed to demonstrate achievement of the element. | |
| 1 | Prepare to lay ESI electrical cables | 1.1 | Work schedules, plans, drawings, workplace procedures and material lists are received and confirmed |
|  |  | 1.2 | Job requirements and workplace procedures are identified and communicated with relevant personnel |
|  |  | 1.3 | Work health and safety (WHS)/occupational health and safety (OHS), environmental and workplace procedures for the laying of electrical cables are obtained and confirmed for the purposes of the work to be performed |
|  |  | 1.4 | Work is prioritised and sequenced for completion within acceptable timeframes following consultation with relevant personnel and in accordance with workplace procedures |
|  |  | 1.5 | WHS/OHS and environmental hazards are identified, WHS/OHS risks are assessed and control measures identified in accordance with workplace procedures |
|  |  | 1.6 | Relevant permits are confirmed and signed in accordance with workplace procedures |
|  |  | 1.7 | Plant, equipment, tools and personal protective equipment (PPE) required for work are identified, obtained and confirmed in working order |
|  |  | 1.8 | Work site is prepared to minimise risk, damage to property, commerce and individuals in accordance with workplace procedures |
|  |  | 1.9 | Traffic management plan is confirmed as being applied in accordance with workplace procedures |
| 2 | Carry out the laying of ESI electrical cables | 2.1 | WHS/OHS, sustainable energy and environmental principles and practices are monitored and followed to reduce incidents in accordance with workplace procedures |
|  |  | 2.2 | Requirements for lifting and/or climbing and/or working at heights and the use of power tools/equipment are followed in accordance with workplace procedures |
|  |  | 2.3 | Electrical cables are laid and sealed in accordance with workplace procedures |
|  |  | 2.4 | Unplanned events are responded to in accordance with workplace procedures |
|  |  | 2.5 | Quality checks of work are undertaken in accordance with workplace procedures |
| 3 | Complete laying of ESI electrical cables | 3.1 | Completed work is checked against work plan, construction plans and drawings for compliance and anomalies are reported in accordance with workplace procedures |
|  |  | 3.2 | WHS/OHS and environmental incidents are reported in accordance with workplace procedures, as required |
|  |  | 3.3 | Work site is rehabilitated, cleaned up and made safe in accordance with workplace procedures |
|  |  | 3.4 | Tools, equipment and surplus resources are, where appropriate, cleaned, checked and returned to storage in accordance with workplace procedures |
|  |  | 3.5 | Relevant work permits are signed off in accordance with workplace procedures |
|  |  | 3.6 | Work records, reports and/or documentation are completed in accordance with workplace procedures |

# Foundation Skills

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| Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. |

# Range of Conditions

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| Range is restricted to essential operating conditions and any other variables essential to the work environment.  Non-essential conditions may be found in the Companion Volume Implementation Guide. |

# Unit Mapping Information

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| This unit replaces and is equivalent to UETTDRCJ21A Lay ESI electrical cables. |

# Links

UET Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>