



Australian Government

UETTD RDS40 Prepare and appraise power systems financial impact statements

Release: 1

UETTDRDS40 Prepare and appraise power systems financial impact statements

Modification History

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

Application

This unit covers the creation, interpretation and application of financial impact statements in electricity network infrastructure augmentations, maintenance and construction activities. It includes project scoping, cost estimating, providing economic justifications and cost-benefit analysis, and the use of guarantee and capital contribution arrangements with customers.

The application of the skills and knowledge described in this unit may require a licence/registration to practice in the workplace subject to regulations for undertaking of electrical work.

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

All competencies in the Common Unit Group must have been completed, plus all competencies in one (1) of the identified Pathway Unit Group(s).

Common Unit Group

UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UEENEEE104A Solve problems in d.c. circuits

UEENEEE107A Use drawings, diagrams, schedules, standards, codes and specifications

UEENEEG101A Solve problems in electromagnetic devices and related circuits

UEENEEG102A Solve problems in low voltage a.c. circuits

UETTDREL11 Apply sustainable energy and environmental procedures

UETTDREL16 Working safely near live electrical apparatus

UETTDRLS62 Implement and monitor the power system organisational WHS/OHS policies, procedures and programs

UETTDRLS63 Implement & monitor power system environmental & sustainable energy management policies & procedures

Testing Pathway Unit Group

UEENEEED104A Use engineering applications software on personal computers

UEENEEEE102A Fabricate, assemble and dismantle utilities industry components

UEENEEEE124A Compile and produce an energy sector detailed report

UEENEEEE125A Provide engineering solutions for problems in complex multiple path circuits

UEENEEEE126A Provide solutions to basic engineering computational problems

UEENEEEG149A Provide engineering solutions to problems in complex polyphase power circuits

UETTD RTS21 Maintain interdependent network protection and control systems

UETTD RTS22 Commission interdependent network protection and control systems

UETTD RTS29 Develop power systems secondary isolation instructional documents

UETTD RTS35 Maintain complex network protection and control systems

Design Pathway Unit Group

UETTD RDS39 Prepare and manage detailed construction plans for electrical power system infrastructure

Competency Field

Design

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan for and coordinate the preparation and appraisal of financial impact statements

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Work health and safety (WHS)/occupational health and safety (OHS) practices/procedures and environmental and sustainable energy procedures, which may influence the preparation and appraisal of financial impact statements, are reviewed and determined
- 1.2** Purpose of the financial statement is established and expected outcomes of the work are confirmed with appropriate personnel
- 1.3** Established procedures, policies and specifications for financial impact statement preparation and appraisal are

obtained or established with appropriate personnel

- | | |
|---|---|
| <p>1.4</p> | <p>Work is prioritised and sequenced for the most efficient and effective outcome following consultation with others for completion within acceptable timeframes, to a quality standard and in accordance with established procedures</p> |
| <p>1.5</p> | <p>Risk control measures are identified, prioritised and evaluated against the work schedule</p> |
| <p>1.6</p> | <p>Liaison and communication issues with others/authorised personnel, authorities, clients and land owners are resolved and activities coordinated to carry out work</p> |
| <p>1.7</p> | <p>Personnel participating in the work are fully briefed and respective responsibilities coordinated and authorised, where applicable, in accordance with established procedures</p> |
| <p>2 Carry out and coordinate the preparation and appraisal of financial impact statements</p> | <p>2.1 Circuit system modelling is used to evaluate alternative proposals in accordance with established procedures</p> |
| <p>2.2</p> | <p>WHS/OHS and sustainable energy principles, functionality and practices to reduce the incidence of accidents and minimise waste are incorporated into the project in accordance with requirements and/or established procedures</p> |
| <p>2.3</p> | <p>Quality of work is monitored against personal performance agreement and/or established organisational and professional standards</p> |
| <p>2.4</p> | <p>Technical advice is given to potential hazards, safety risks and control measures so that monitoring and preventative action can be undertaken and/or appropriate authorities consulted, where necessary, in accordance with requirements and established procedures</p> |
| <p>2.5</p> | <p>Essential knowledge and associated skills are applied to analyse specific data and compare it with compliance specifications to ensure completion of the project within an agreed timeframe according to requirements</p> |
| <p>3 Complete and coordinate the preparation and</p> | <p>3.1 Final inspections of the financial impact statement are undertaken to ensure they comply with all requirements</p> |

appraisal of financial impact statements

and include all specifications and documentations needed to complete the appraisal brief

- 3.2** Appropriate personnel are notified of completion and reports and/or completion documents are finalised
- 3.3** Reports and/or completion documents are submitted to relevant personnel/organisations for approval and, where applicable, statutory or regulatory approval
- 3.4** Approved copies of financial impact statement documents are issued and records are updated in accordance with established procedures

Foundation Skills

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

Range of Conditions

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

This unit replaces and is equivalent to UETTD40A Prepare and appraise power systems financial impact statements.

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>

Assessment Requirements for UETTDRDS40 Prepare and appraise power systems financial impact statements

Modification History

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

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements including the use of risk control measures
- applying sustainable energy principles and practices
- completing six (6) designs in total, drawn from at least two (2) of the following project types:
 - overhead line designs
 - underground line designs
 - distribution substation designs
 - customer substation designs
 - transmission substation designs
 - sub-transmission substation designs
 - public lighting designs
 - zone substation designs
 - substation secondary systems – commissioning
 - substation secondary systems – maintenance and augmentation
 - generation secondary systems – commissioning
 - generation secondary systems – maintenance and augmentation
 - high voltage (HV) primary plant – commissioning
 - HV primary plant – maintenance and augmentation
- developing financial impact statements, including activities addressing the correction of errors in the process
- dealing with unplanned events on at least one (1) occasion.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- principles of safe design encompassing:

- Commonwealth/state/territory legislation, standards, codes, supply authority regulations and/or enterprise requirements associated with safe design principles
- particular reference to state and territory regulations regarding working near energised conductors, electrical access, heights, confined space, testing procedures and licensing rules
- application of safe design principles:
 - safe design duty related information
 - safe design process related information
 - safe design evaluations
- methodology used in writing enterprise-specific management reports encompassing:
 - Commonwealth, state/territory and local government legislation, supply authority regulations standards, code, and/or enterprise requirements applicable to the writing enterprise-specific management reports
 - techniques in researching, collating and analysing information for the report:
 - recording, filing and retrieving systems
 - storing and retrieving data from computer systems
 - relationship of management reports to enterprise policies and procedures:
 - enterprise structure and resources
 - WHS/OHS and risk management enterprise data, financial and operational data
 - environmental enterprise policies and procedures
 - industrial relations policies and procedures
 - anti-discrimination policies and procedures:
 - techniques in writing enterprise-specific management reports:
 - methods used to disseminate information and facilitate enterprise requirements
 - document proformas and compliance and legislative requirements to produce effective reports in the appropriate format
- financial impact statements encompassing:
 - techniques in budgeting and tracking project progress
 - preparation and analysis of budget figures
 - techniques in the coordination of contingencies and risks that have a budget effect
 - techniques in dealing with problems that have a budget effect
 - examples of forms of recording project status and costings
 - application of relevant computer software packages
 - methods of prepare proposals:
 - preparing specifications, tender and evaluation and letting of tenders
 - techniques in estimating:
 - contract documents, drawings, specifications, general conditions and special conditions
 - resources costs:
 - hourly rates (labour, plant, material, subcontractors)
 - direct and indirect costs, contingency costs, project margin, cost of money, budget,

- preliminary tender, labour costing and equipment costing
- economic comparisons and contract variations
- techniques in preparing and interpreting proposals and tender documents
- techniques in preparing cost estimates for a project from relevant data
- techniques in preparing financial impact statements
- project management encompassing:
 - Commonwealth, state/territory and local government legislation, standards, codes, supply authority regulations and/or enterprise requirements, including relevant certification and licensing applicable to the duties and responsibilities for management a project
 - analyse functions of project management to determine achievement of project objectives
 - relationship of stakeholders to the project
 - techniques in development of project plan:
 - project integration, scope, timelines, cost, quality, resources, communication/protocol requirements, risk/uncertainties and procurement and contacting
 - relationship between project processes, project life and project phases
 - planning and control procedures, resource management and risk management
 - techniques, methodologies and tools available to project managers
 - types of internal and external environmental factors that may affect the project.

Assessment Conditions

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

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated conditions involving realistic and authentic activities that replicate operational workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry to perform preparation and appraisal of financial impact statements
- applicable documentation, including workplace procedures, relevant industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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>