LITERACY PROFILE:

Line Mechanic Trainee

Role: The role of a trainee line mechanic is to assist line mechanics carry out construction and maintenance work on aerial and underground electrical line systems. This profile identifies the literacy tasks and skills that are part of this role.

Literacy includes reading, writing, speaking and listening, critical thinking, and the use of information communication technology.

Most of the tasks listed will involve the use of technical language and abbreviations relevant to the electricity supply industry.

Reading tasks

Recognise and interpret pictures, symbols, abbreviations and codes

- Safety signs
- Warning signs
- Equipment IDs
- Asset numbers
- Road signs
- Measurements
  e.g. resistance meter
- WOF & service stickers

Read and understand very short documents

- Job board
- Timesheets
- Leave forms
- Accident and incident forms
- Vehicle check sheets
- Permits
- Switching instruction sheets
- Equipment recording sheets
- Equipment codes
- Job costing codes
- Tailgate and hazard management prompt sheet

Read and understand short documents

- Job instructions
- Operating procedures
- Traffic management plans
- Memos and notices
- Position descriptions

- Employment contract
- Training agreement
- Training manuals
- Training material
- WAP

Read and understand complex documents

- Circuit diagrams
- Manuals and handbooks
  - Safety
  - Safe practice
  - EEA
  - EWRB
- Regulations
- Site plans
- Maps

NB Reading and numeracy are linked in many of these tasks

Reading skills

Interpret graphic symbols.

Recognise a range of text types.
- Signs
- Codes
- Forms
- Drawings
- Procedures
- Manuals
- Regulations

Recognise numbers in written formats.

Match numbers or identifiers across different texts.

Understand common industry vocabulary and abbreviations.

Use a range of strategies to find out information or the meaning of unfamiliar words or phrases.
- Reference sources
  - Directory
  - Dictionary
  - Training text
- Ask someone
- Make inferences from surrounding text

Use a guide to document contents.
- Index
- Table of contents
- Key
- Legend

Use a range of strategies to build meaning from texts.
- Predict what will be contained in a text
- Scan text to find specific information
- Skim text for "gist"
- Read text thoroughly

Understand written and numerical information from graphical material.
- Tables
- 2D drawings
- Maps

Writing tasks

Complete simple documentation

- Tailgate sheet, job safety analysis
- Work done
- Equipment record
- Switching instruction sheet
- Booking equipment
- Materials order
- Vehicle check list
- Record measurements e.g. earth testing
- Odometer & vehicle ID on petrol card
- WAP

Write a brief factual statement

- Timesheets
- Draw a sketch plan
- Leave forms
- Log book
- Training notes

Write a paragraph

- Accident and incident forms
- Answers to assignments and assessments in training

Writing skills

Understand that different writing styles are used for different types of writing.
- Note
- List
- Checklist
- Form
- Assignments (training)
- Assessments (training)

Complete forms (including assessment questions in training) using numbers, single words, or short sentences.
- Handwriting must be legible
- Abbreviations can be used
- Spelling must be understandable, but correct spelling is not essential
- Grammar and punctuation must be understandable

Draw sketches that clearly represent work done or job requirements.
- Geometric shapes are represented clearly
- Dimensions are drawn in proportion
- Correct abbreviations are used
- Exact or accurate dimensions are included

Summarise written training material or information from oral presentations.

Write assignments (training).
- Plan assignment writing (beginning, middle and end)
- Write sentences and paragraphs
- Use diagrams and sketches to help make a point
- Spelling should be correct
- Grammar and punctuation should be mostly correct
- Use editing skills

Speaking and listening tasks

Listen to procedures and instructions given orally and respond accordingly

- Job instructions
- Tailgate instructions
- Explanations
- Requests for assistance
- Oral explanations and instructions in training

Give factual information orally and check for understanding

- Cell phone or RT
- Respond to requests for assistance
- Order equipment or materials from company base
- Communicate with office staff as required
- Verbalise steps in job so team leader can supervise
- Answer oral assessment questions as part of training

Participate in discussions with work team

- Contribute to discussion at team meetings
- Talk to clients, members of the public about work to be done or in progress
- Talk to sales reps

Speaking and listening skills

Speak clearly.

Use words, pronunciation, and tone appropriate to situation and person.

Give information in a sensible order.

Use active listening skills.
- Repeat message back to sender
- Summarise instructions in own words

- Use following techniques e.g. say "aha" or "okay" as you follow what someone is saying

Use questioning techniques including open or closed questions to gain information, check understanding, and encourage further discussion.

Use suitable body language.

Read body language of person speaking or being spoken to and respond appropriately.

Numeracy tasks

Recognise and understand alphanumeric codes

- Equipment IDs
- Job costing codes
- Asset numbers
- Axle weights
- Map co-ordinates

Record data from workplace observations or measurements

- Meter readings – digital & analogue
- Equipment ID number (e.g. transformer number)
- Cost codes
- GL numbers
- Length
- Time

Carry out simple calculations for specific work tasks

- Estimate quantities of materials needed to complete job
- Estimate time needed to carry out job
- Calculate time spent on jobs
- Calculate materials used
- Manifest weights
- Check pay slip

Carry out a range of measurements

- Tape measure
- Meters (e.g. voltmeter)

NB Numeracy is linked with reading in many of these tasks

Numeracy skills

Recognise numbers as part of a code.

Use numbers.
- Whole numbers
- Decimals
- Fractions
- Percentages

Do number problems.
- Addition
- Subtraction
- Multiplication
- Division

Understand place value.

Estimate.
- Length
- Time
- Weight
- Number

Measure accurately.
- Length
- Time
- Weight
- Number

Understand 12 and 24 hr clock.

Interpret numerical information represented in different ways.
- Graphs
- Tables
- Scales
- Dials

Understand map grids.

Extract information from a 2D drawing of 3D object.

Critical thinking tasks

Identify when workplace procedures are not being met and take appropriate action

- Health & safety
- Traffic

Assess situation and identify appropriate action to take

- Assess what permits are needed
- Work out best order to complete a job
- Select correct equipment and tools to do the job effectively
- Understand principle that "time is money" and spend appropriate amounts of time on a job
- Evaluate temporary repair vs replacement
- Solve problems
- Respond to emergency
- Evaluate whether job is completed correctly
- Review finished job
- Follow traffic regulations, road rules

Assess situation and decide if assistance is needed

- Seek help from others when needed

Critical thinking skills

Analyse when action should be taken.

Evaluate what action should be taken.

Reflect when action cannot be taken independently and seek assistance.

Use a problem solving methodology.
- Identify issue
- Identify possible solutions
- Determine best outcome
- Decide on plan of action
- Carry out plan
- Review result to see if plan worked

Visualise 3D objects from a 2D drawing.

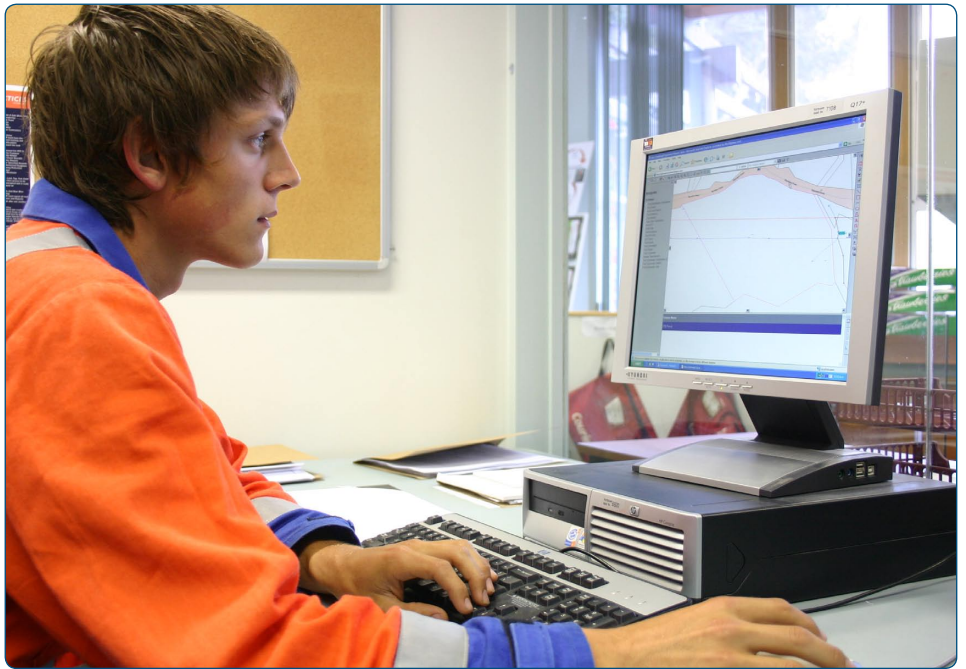# Information and Communications Technology Tasks

Use information and communications technology with customised software

- Job control
- Stock control
- Invoicing

Use information and communications technology with commercial software packages

- E-mail

NB Tasks listed here concentrate on the information technology skills needed not the level of reading and writing required.

Information and Communications Technology Skills

Understand the names and basic purpose of computer hardware devices.
- CPU
- Keyboard
- Mouse
- Screen
- Printer

Understand how to operate a computer to launch a software application.
- Start the computer
- Log-in if needed
- Start appropriate application

Understand and use common software functions.
- Open
- Save
- Close

Enter or update data on a computer.
- Keyboard
- Mouse
- Other input devices

Notes:

This profile is based on roles observed at a number of electricity supply companies. The profile, therefore, represents a combined set of tasks. Line mechanic trainees will carry out different combinations of the tasks identified depending on how far through their training they are. Different companies may require trainees to undertake slightly different combinations of these tasks. The differences will depend on the company's structure and systems.