



ENERGY &
ENVIRONMENT
AWARDS

Skills for a greener world

Energy & Environment Awards L4 End-point
Assessment for Electrical Power Networks Engineer
(Control Engineer; Electrical Project Engineer and
Operational Delivery Engineer)

Supporting Documents

QAN 610/6008/2
ST0475 V1.0

Supporting Documents for

EEA Level 4 End-point Assessment for Electrical Power Networks Engineer

(Control Engineer; Electrical Project Engineer and Operational Delivery Engineer)

QAN 610/6008/2

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Updates to the supporting documents

Since the first publication of Energy & Environment Awards Electrical Power Networks Engineer Supporting Documents – Control Engineer; Electrical Project Engineer and Operational Delivery Engineer, the following updates have been made.

Version	Date first published	Section updated	Page(s)
v4.0	August 2025	Rebranded	All
v3.0	10 October 2023	Rebranded	All
		Revised Practice Knowledge Test	10 - 34
		Revised Appendix D	36 - 45
v2.0	25 April 2023	New template and pathway specific criteria IDs	All
v1.0	2020	First published	All

Appendix A: Glossary

Amplification – provides more detail on how individual knowledge, skills or behaviours statements should be interpreted. Where the KSB statements, themselves are deemed self-explanatory, no amplification is provided. Assessment may include questions on anything identified in the amplification

Behaviours (as part of KSBs) – specific mindsets, attitudes or approaches identified as part of the apprenticeship standard that must be evidenced during end-point assessment

Elements – are the knowledge, skills and behaviours and what is needed to competently undertake the duties required for an occupational standard

Gateway - the stage of the apprenticeship where the apprentice, employer and training provider determine whether the apprentice is ready to undertake end-point assessment

Guidance – is only provided where it is required to support interpretation of the KSB statements

Knowledge (as part of KSBs) – specific information, technical detail, and ‘know-how’ identified as part of the apprenticeship standard that must be evidenced during end-point assessment

Pathways – a specialist route within an apprenticeship standard that builds on the occupational competence for a new entrant to the occupation

Skills (as part of KSBs) – the practical application of knowledge identified as part of the apprenticeship standard that must be evidenced during end-point assessment

Standard – An occupational standard is a description of an occupation. It contains occupational profile, and describes KSBs needed for someone to be competent in the occupation’s duties. Occupational standards are developed by employers for occupations that meet the Institute for Apprenticeships and Technical Education current occupation criteria

Topic - is a collection of elements grouped into a theme e.g. Health and Safety

Appendix B: Gateway Eligibility Form

(Standard Version: ST0475 version 1.0; Assessment Plan Version: ST0475/AP01)

Apprentice's name:	Apprentice's job title:
Name of Employer:	Name of Training provider:
Employer representatives present:	Training provider representatives present:
Apprenticeship start date:	Apprenticeship on-programme end date:
Gateway meeting date:	
Has the apprentice taken any part of the end-point assessment for this apprenticeship standard with any other End Point Assessment Organisation?	Y / N
If "Yes" please give details:	

Apprentice's details

Eligibility requirements:

The apprentice must confirm their achievement of the following:

Note: For apprentices aged 19+, if maths and/or English have been attempted but not achieved evidence of the attempt should be submitted.

Eligibility requirement	Achieved by the apprentice? Y/N	Evidence (Scans of certificates MUST be included)
Achieved Level 2 English or higher		
Achieved Level 2 Maths or higher		
Satisfactory completion of the formal training plan agreed with apprentice by the employer		
Compiled and submitted a competent work log of evidence that meets the specification requirements, on which the technical interview will be based		

Gateway Eligibility Declaration

The apprentice, the employer and the training provider must sign this form to confirm that they understand and agree to the following:

1. The apprentice has completed the required on-programme elements of the apprenticeship and is ready for end-point assessment with Energy & Environment Awards.
2. Energy & Environment Awards has been informed about any reasonable adjustment and/or special considerations requests.
3. The apprentice will only submit their own work as part of end-point assessment.
4. All parties agree that end-point assessment evidence may be recorded and stored by Energy & Environment Awards for quality assurance purposes.
5. The apprentice has been on-programme for a minimum duration of 365 days.
6. The apprentice has achieved English and maths Level 2 or higher as detailed in this document.
7. The apprentice has compiled and submitted a competent work log of evidence, on which the technical interview will be based.
8. The apprentice, if successful, gives permission for Energy & Environment Awards to request the apprenticeship certificate from the ESFA who issue the certificate on behalf of the Secretary of State.
9. The apprentice has been directed to Energy & Environment Awards Appeals Policy and Complaints Policy.
10. The employer/training provider has given Energy & Environment Awards at least three months' notice of requesting this EPA for this apprentice.
11. If the Gateway Eligibility Report is not completed in full, meeting all requirements, and submitted to Energy & Environment Awards, the end-point assessment cannot take place.

Signed on behalf of the employer (print name):	Signature:	Date:
Signed on behalf of the training provider (print name):	Signature:	Date:
Apprentice's name (print):	Signature:	Date:

Energy & Environment Awards use only:	
Energy & Environment Awards Sign off:	
Comments/actions:	

Appendix C: Practice Knowledge Test

Level: 3

Electrical Power Networks Engineer

Paper Code: Practice Paper

This examination consists of 40 multiple-choice questions.

The Pass mark is 32 correct answers.

A mark of 36 or more is a Distinction.

The duration of this examination is 60 minutes.

You must use a **pencil** to complete the answer sheet - pens must NOT be used.

When completed, please leave the examination answer sheet and question paper on the desk.

For this paper:

- the use of a scientific calculator (non-programmable) is permitted
- access to the internet or intranet is NOT allowed
- apprentices can refer to any material as this test is open book i.e. Training Materials, Company Policies, Work Logs

For each question, fill in ONE answer ONLY.

If you make a mistake, ensure you erase it thoroughly.

You must mark your choice of answer by shading in ONE answer circle only. Please mark each choice like this:

MARKING INSTRUCTIONS

☐ A ☐ B ☐ C ☒ D **ANSWER COMPLETED CORRECTLY**

Examples of how NOT to mark your examination sheet. **These will not be recorded**

☐ A ☐ B ☐ C ☐ D **DO NOT** partially shade the answer circle.

☐ A ☐ B ☒ C ☒ D **DO NOT** use ticks or crosses.

☐ A ☐ B ☐ C ☐ D **DO NOT** use circles.

☐ A ☐ B ☒ C ☒ D **DO NOT** shade over more than one circle.

**This paper must be returned to Energy & Environment Awards
with the apprentice answer sheets.**

You may use this page for rough work. This page must not be removed.

Question 1

Identify the material that is typically used in the design of a transformers core to reduce the level of hysteresis loss.

Possible answers

a)	Limited brass
b)	Cross link polyethylene
c)	Silicon alloys
d)	Tungsten carbide

Question 2

Identify the term that is used to describe the circulating movement of current back and forth in the core of a transformer creating heat.

Possible answers

a)	Copper losses
b)	Eddy currents
c)	Lenz law
d)	Electromotive force

[Turn to the next page for question 3]

Question 3

Identify the phrase that is correct for the following statement about the Root Mean Square (r.m.s) value.

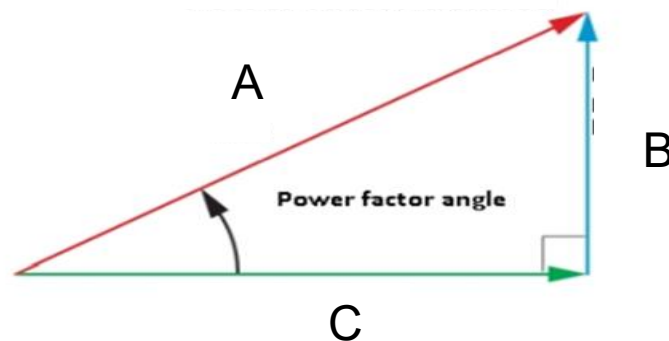
The r.m.s value of an a.c. circuit is _____ of direct current which would have the same effect or energy change as the alternating current.

Possible answers

a)	Equal to value
b)	Twice the value
c)	Half the value
d)	The square value

Question 4

Refer to the Power Factor diagram below. What do the letters A, B and C represent?



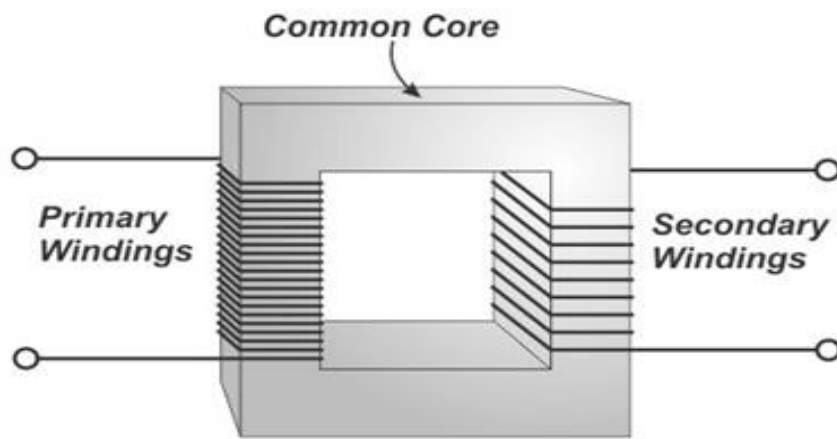
Possible answers

a)	A = Apparent Power, B = Real Power and C = Reactive Power
b)	A = Reactive Power, B = Apparent Power and C = Real Power
c)	A = Apparent Power, B = Reactive Power and C = Real Power
d)	A = Reactive Power, B = Real Power and C = Apparent Power

Question 5

The number of secondary windings on a transformer connected to an alternating current (AC) has been decreased.

What effect will this have on the output voltage?



Possible answers

a)	Decrease the output voltage
b)	Decrease the input voltage
c)	Increase the output voltage
d)	Increase the input voltage

[Turn to the next page for question 6]

Question 6

For a balanced three-phase system, which ONE of the following is the formula for calculating the PHASE voltage of a STAR connected transformer?

Abbreviations below stand for:

VP – Phase Voltage

VL – Line Voltage

IL – Line Current

Ip – Phase Current

$\sqrt{}$ - Root 3 (root of three)

Possible answers

a)	$VP = VL \div \sqrt{3}$
b)	$VP = VL$
c)	$VP = IL \div Ip$
d)	$VP = VL - \sqrt{3}$

Question 7

In a balanced star-connected three-phase system the value of the phase current:

Possible answers

a)	varies above and below the line current
b)	is higher than the line current
c)	is a third less than the line current
d)	is equal to the line current

Question 8

In a balanced three-phase system with delta-connected load and 415 V line voltage, what would the value of the phase voltage be?

Possible answers

a)	0 V
b)	240 V
c)	415 V
d)	440 V

Question 9

In a balanced three-phase system with a star-connected load and 10 A line current, what would be the value of the phase current?

Possible answers

a)	5.77 A
b)	10 A
c)	17.3 A
d)	30 A

[Turn to the next page for question 10]

Question 10

Which ONE of the following describes the effect of harmonics on a three-phase electrical network?

Possible answers

a)	The networks current and voltage are distorted and deviate from their standard sinusoidal waveforms
b)	The networks current and voltage are regulated and conform to their standard sinusoidal waveforms
c)	The networks current is decreased, and the voltage increased proportionally to regulate their standard sinusoidal waveforms
d)	The networks current and voltage is increased causing network problems and system faults

Question 11

Which harmonic typically causes neutral current to increase most significantly?

Possible answers

a)	The third harmonic
b)	The fifth harmonic
c)	The seventh harmonic
d)	The twelfth harmonic

[Turn to the next page for question 12]

Question 12

In a balanced three-phase system, what would be the value of the neutral current?

Possible answers

a)	Zero
b)	Line current
c)	Phase current
d)	3 x phase current

Question 13

Three-phase transformers should only be connected in parallel under which ONE of the following conditions?

Possible answers

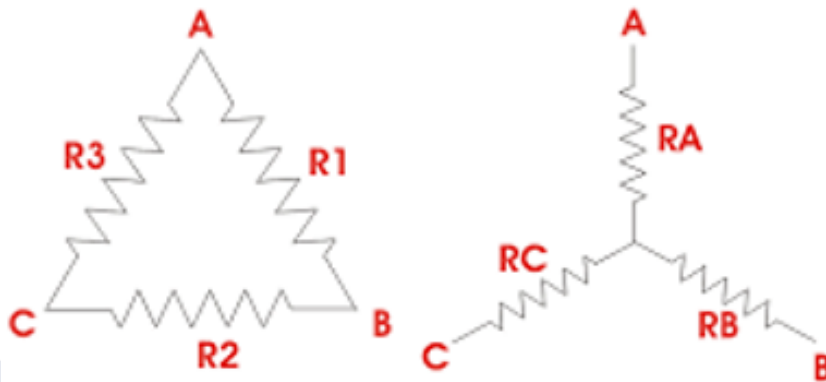
a)	When they are identical in all respects
b)	When they have exactly the same losses
c)	When permission is obtained from the manufacturer
d)	When they have the same secondary voltages

[Turn to the next page for question 14]

Question 14

Refer to the diagram below.

In the order shown, which transformer wiring configurations does this diagram represent?



Possible answers

a)	Single-phase star, single-phase delta
b)	Three-phase star, three-phase delta
c)	Single-phase delta, single-phase star
d)	Three-phase delta, three-phase star

[Turn to the next page for question 15]

Question 15

The UK's electricity is typically generated in large commercial power stations.
At what voltage is it generated?

Possible answers

a)	11 kv
b)	25 kv
c)	132 kv
d)	400 kv

Question 16

At what voltage is the transmission of electricity across the UK primarily conducted?

Possible answers

a)	11 kv
b)	132 kv
c)	415 kv
d)	400 kv

[Turn to the next page for question 17]

Question 17

What are the typical voltage tolerances for high voltage (up to 132 kV) power networks?

Possible answers

a)	High voltage $\pm 3\%$ of nominal voltage
b)	High voltage $\pm 6\%$ of nominal voltage
c)	High voltage $+6\%$ to -10% of nominal voltage
d)	High voltage $\pm 10\%$ of nominal voltage

Question 18

Which statement describes the typical method for controlling the output voltage on a 33/11 kV transformer to keep it within its statutory limits?

Possible answers

a)	An automatic voltage control relay monitors the transformers output voltage and regulates the voltage via a tap changer
b)	A control engineer monitors the transformers output voltage and regulates the voltage via an automated tap changer
c)	A current transformer (CT) monitors the transformers output voltage and regulates the voltage via a tap changer
d)	An automated tap changer monitors the transformers output and regulates the voltage via an automatic voltage control relay

[\[Turn to the next page for question 19\]](#)

Question 19

An engineer needs to determine the electrical rating of a switchgear, that will be used on a power network.

What critical factor should the engineer consider?

Possible answers

a)	The manufacturer of the switchgear to be used
b)	The location of the switchgear in the electrical circuit
c)	The proximity of commercial and domestic buildings
d)	The ability to operate the switchgear manually or remotely

Question 20

'A low voltage network which has the neutral bonded to earth at several different points in the system.' What type of earthing system is the above known as?

Possible answers

a)	Terra Neutral Split system
b)	Terra Neutral Terra Firma system
c)	Protective Multiple Earthing system
d)	Earth Loop Impedance system

[Turn to the next page for question 21]

Question 21

A transformer which consists of a single winding and is used to step up or step down a constant supply voltage.

What type of transformer is this known as?

Possible answers

a)	Current transformer
b)	Voltage transformer
c)	Earthing transformer
d)	Auto-transformer

Question 22

What would be the effect of a fault on the protection of a low voltage network with a low earth loop impedance value?

Possible answers

a)	The fault current would take longer to activate the protection, the lower the value
b)	The fault current would activate the protection faster, the lower the value
c)	The fault current would activate the protection at the same time regardless of the value
d)	The fault current would not activate the protection if the value was below the UK standard

[Turn to the next page for question 23]

Question 23

When considering network protection there are devices that provide an advantage of being able to support overcurrent for a period of time and be reset.

Which device would provide this advantage?

Possible answers

a)	High Rupturing Capacity (HRC) fuses
b)	Rewireable fuses
c)	Contactor relays
d)	Rewireable relays

Question 24

Which ONE of the following is an example of a 'Rise in Earth Potential' (ROEP)?

Possible answers

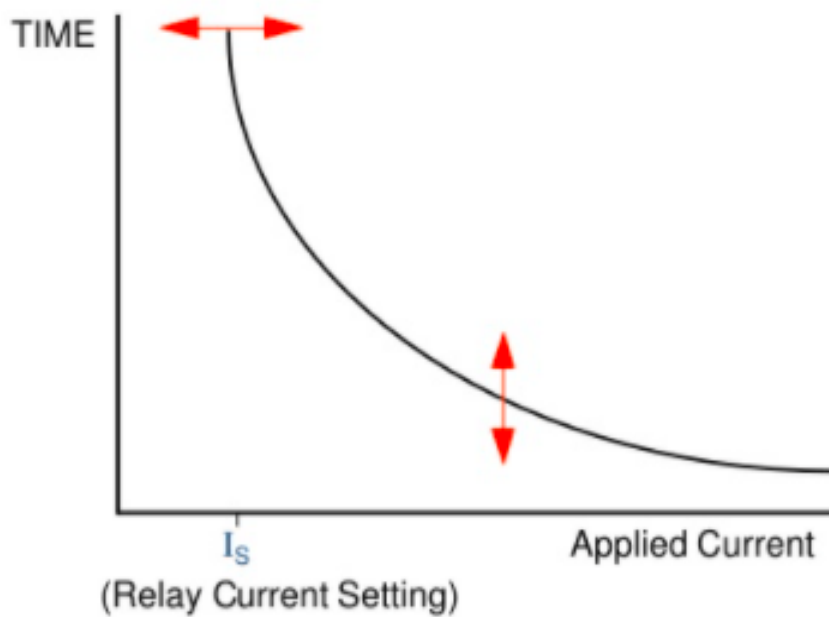
a)	A ROEP is created by increasing the number of earth electrodes in a substation to prevent system faults
b)	A ROEP is a phenomenon which occurs during long periods of high voltage switching in a substation which stresses the earth system
c)	A ROEP is created by bonding all auxiliary steelwork to earth in a substation together to prevent system faults
d)	A ROEP occurs when a large current flows to earth through the effects of a high voltage fault

[\[Turn to the next page for question 25\]](#)

Question 25

A relay operates by the principle that the higher the current value the lesser time it will take the relay to operate.

What protocol does this follow?



Possible answers

a)	Immediate Delay Measured Sequence (IDMS) protocol
b)	Inverse Definite Minimum Time (IDMT) protocol
c)	Inverse Decision Time Measure (IDTM) protocol
d)	Individual Delayed Time Sequence (IDTS) protocol

Question 26

Which piece of network equipment does the following sentence describe?

‘It reduces earth fault current and limits the amount of fault current returning to the transformer’.

Possible answers

a)	A voltage transformer
b)	A switch fuse
c)	A neutral earthing resistor
d)	A protective multiple earth

Question 27

Voltage transformers (VT) can be used for circuit control, safety protection and measurement.

Which ONE of the following describes the principle of VTs operation?

Possible answers

a)	A VT can be used to step down the voltage of the system to a value which is acceptable to the lower rating of meters and relays
b)	A VT can be used to step up the voltage of the system to a value which is acceptable to the higher rating of meters and relays
c)	A VT can be used to convert the alternating waveform of the system to a direct waveform to supply meters and relays
d)	A VT can be used to accept the voltage of the system and connect it directly to the higher rated meters and relays

Question 28

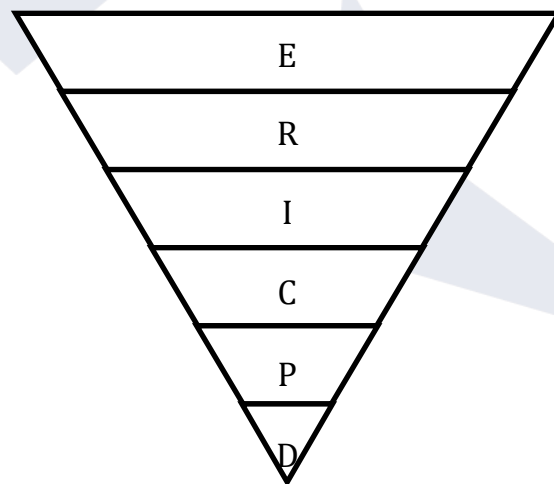
Which ONE of the following describes the typical capabilities of a high voltage switch?

Possible answers

a)	The switch is load making but not load breaking or fault making
b)	The switch is non-load making but is load breaking and fault making
c)	The switch is load making and breaking, and fault making
d)	The switch is non-load making or breaking but is fault making

Question 29

ERICPD is an acronym used by health and safety organisations as a risk assessment model to help prioritise health and safety measures in the workplace. What does ERICPD stand for?


Possible answers

a)	Eliminate, Report, Investigate to Control Potential Danger
b)	Eliminate, Remove, Insulate, Caution, Protect and Discipline
c)	Eliminate, Reduce, Isolate, Control, PPE and Discipline
d)	Eliminating Risks Insures Complete Protection from Danger

Question 30

Which ONE of the following identifies the primary purpose of a risk management strategy?

Possible answers

a)	A risk management strategy provides a cost efficient approach to identifying, assessing, and managing the company's financial risk
b)	A risk management strategy provides a timely and effective method of measuring the exposure to risk in the event of an incident
c)	A risk management strategy provides a structured and coherent approach to identifying, assessing, and managing risk
d)	A risk management strategy provides an auditable process which protects a company from any liability in the event of an incident

Question 31

Which ONE of the following describes the primary purpose of the Electricity at Work Regulations 1989?

Possible answers

a)	They aim to prevent the loss of time or production in the process of maintaining an electrical supply in a work environment
b)	They aim to prevent death or injury to any person from electrical causes while working or in a work environment
c)	They aim to improve electrical working practices to provide a more efficient use of tools and equipment in a work environment
d)	They aim to reduce death or injury to an acceptable level to any person from electrical causes while working or in a work environment

Question 32

A 'permit-to-work' system is a formal written system used to control certain types of work that are potentially hazardous.

Identify the elements which must be included on a 'permit-to-work' document?

Possible answers

a)	Date of issue, description of work, points of contact, signature of document receiver
b)	Date and time of issue, location of work, points of isolation, signatures of issuer and receiver
c)	Date and time of issue, cost of work, points of switching, signature of company director
d)	Date and time of issue, description of work, points of switching, signatures of the working party

Question 33

In relation to commercial projects, the Construction Design and Management (CDM) Regulations 2015, require that under certain circumstances construction work is notifiable in writing to the HSE.

Which statement identifies ONE of those circumstances?

Possible answers

a)	Where planned construction work will last longer than 20 working days
b)	Where planned construction work will last longer than 30 working days
c)	Where planned construction work will last longer than 40 working days
d)	Where planned construction work will last longer than 50 working days

Question 34

The Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR) places duties to report certain incidents that may involve the safety of those not employed by the duty holder.

Which of the following identifies ONE of these incidents?

Possible answers

a)	Any single interruption of supply of 5 megawatts or more at the time of the interruption for a period of one hour or longer
b)	Any single interruption of supply of 1 megawatt or more at the time of the interruption for a period of five hours or longer
c)	Any multiple interruption of supply of 20 megawatts or more for more than two 5 minutes periods
d)	Any single interruption of supply of 20 megawatts or more at the time of the interruption for a period of one hour or longer

Question 35

Which statement states the principles of maintenance as defined by the Electricity at Work Regulations 1989?

Possible answers

a)	As may be financially viable to prevent danger, all systems shall be maintained so as to prevent, so far as is reasonably practicable, such danger
b)	As may be necessary to improve performance, all systems shall be maintained on an annual basis to prevent any loss of power to the system
c)	As may be convenient to prevent danger, all systems shall be isolated to prevent injury to operatives working on the system, based on time and cost of maintenance operation
d)	As may be necessary to prevent danger, all systems shall be maintained so as to prevent, so far as is reasonably practicable, such danger

Question 36

What is meant by the term achieving 'Safety from the System'?

Possible answers

a)	Safeguards that all equipment shall be made dead, prior to any work activities being permitted on the electrical system
b)	The condition which safeguards tools and equipment from the dangers of work being conducted on the electrical system
c)	The condition which safeguards persons working on or near to equipment from the dangers which are inherent in that system
d)	The condition which safeguards persons, tools, equipment, and plant when working near the electrical system

Question 37

Ofgem set price controls on the revenues of Transmission and Distribution Companies using the RIIO model to encourage Companies to consider a number of factors.

What factors do the initials RIIO stand for?

Possible answers

a)	Revenue = Ideas + Implementation + Outlay
b)	Reward = Input + Investment + Outlay
c)	Reward = Innovation + Ideas + Outputs
d)	Revenue = Incentives + Innovation + Outputs

Question 38

The Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR) place duties on persons to report certain instances.

Which ONE of the following is reportable under ESQCR?

Possible answers

a)	More interruptions to the electricity supply
b)	Major interruptions to the electricity supply
c)	All interruptions to the electricity supply
d)	All planned interruptions to the electricity supply

Question 39

The Construction Design and Management Regulations 2015 (CDM) place certain responsibilities on duty holders involved in the work project to improve health and safety.

Which ONE of following states an aim of the CDM regulations?

Possible answers

a)	To appropriately cost the work so the tasks involved are managed to achieve financial success
b)	To carefully plan the work so the risks involved are kept to a minimum and recorded for audit purposes
c)	To plan the work to ensure the project is delivered within the set timescales
d)	To sensibly plan the work so the risks involved are managed from start to finish

Question 40

The regulator Ofgem set targets for the Energy Network Companies.

Which ONE of the following identifies three of the targets?

Possible answers

a)	Consumer value, economical network design and good waste disposal
b)	Customer service, network reliability and environmental performance
c)	Customer communication, network performance and cost reduction
d)	Consumer interaction, network monitoring and reduced wastage

End of Questions

Practice Knowledge Assessment

Answer scheme

Question	Answer
1	C
2	B
3	A
4	C
5	A
6	A
7	D
8	C
9	B
10	A
11	A
12	A
13	D
14	D
15	B
16	D
17	B
18	A
19	B
20	C

Question	Answer
21	D
22	B
23	C
24	D
25	B
26	C
27	A
28	C
29	C
30	C
31	B
32	B
33	B
34	A
35	D
36	C
37	D
38	B
39	D
40	B

SAMPLE ANSWER SHEET

Candidate ID	Attempt
Last Name	
First Name	
Exam Date	Paper
Centre Name	
Centre Number	

MARKING INSTRUCTIONS

Answers should be completed using a HB pencil.

☐ ☐ ☐ ☒ **ANSWER COMPLETED CORRECTLY**

Examples of how NOT to mark your examination sheet. **These will not be recorded**

☐ ☐ ☐ ☐ **DO NOT** partially shade the answer circle.

☐ ☐ ☒ ☒ **DO NOT** use ticks or crosses.

☐ ☐ ☐ ☐ **DO NOT** use circles.

☐ ☐ ☒ ☒ **DO NOT** shade over more than one circle.

1	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	11	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	21	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	31	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
2	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	12	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	22	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	32	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
3	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	13	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	23	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	33	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
4	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	14	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	24	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	34	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	15	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	25	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	35	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
6	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	16	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	26	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	36	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
7	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	17	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	27	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	37	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
8	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	18	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	28	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	38	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
9	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	19	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	29	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	39	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
10	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	20	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	30	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	40	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

Appendix D - Level 4 Electrical Power Networks Engineer Practical Observation Planning Form

Instructions

This form has two purposes:

1. To help you plan a practice Practical Observation for your apprentices
2. To inform Energy & Environment Awards of the proposed task(s) for the live assessment

The apprentice is assessed:

- in a real working environment
- typically, be one day i.e. between 5 and 6 hours depending on the activity(s) and a maximum of 6 hours. The actual time allowed will be based on the comparable time an industry competent worker would take to achieve successful task(s) completion

Equipment and resources needed for the assessment must be in good and safe working condition.

The activities should be designed to assess a broad range of the skills, knowledge and behaviours developed over the period of the apprenticeship. However, as a minimum the practical observation must cover the activities and KSBs listed in the Planning Form below.

Energy & Environment Awards offers a service to review the employer/training provider's Practical Observation task brief.

Task variations: If you have more than one apprentice being assessed, use the "Practical Task variations" section of the form to indicate what the task variations that will be put in place so that apprentices are not asked to complete identical tasks.

Complete the 'Level 4 Electrical Power Networks Engineer Practical Observation Planning Form' and submit it to the Service Delivery team via enquiries@energyenvironmentawards.co.uk, for **review 1 month before the start of the end-point assessment**.

Level 4 Electrical Power Networks Engineer Practical Observation Planning Form

Employer name and site address:	
Training provider (if applicable)	
Standard:	Electrical Power Networks Engineer
Pathways: (Select a pathway)	Control Engineer <input type="checkbox"/> Electrical Project Engineer <input type="checkbox"/> Operational Delivery Engineer <input type="checkbox"/>
Level	4
Location of practical	
Summary of activity: Please provide a brief summary of the overall task/s to be completed during the assessment period	
Contact Details: Employer/training provider representative, email address and contact number overseeing the setup of the competency test (documents and site).	
Date submitted to Energy & Environment Awards	

Estimated total duration of practical task(s) must be typically one day i.e. between 5 and 6 hours depending on the activity and a maximum of 6 hours.

Please state time for the practical task(s): _____

Practical Observation Checklist

This checklist will assist the employer and/or training provider with planning the activity. Please confirm all required elements are covered:

Core knowledge to be covered in the task	Covered on activity
Please use the space below to provide a summary of the planned practical observation activities for each criteria.	
Explain how the apprentice will meet: K6 Company requirements with regard to project management tools, techniques and processes.	<input type="checkbox"/>
Explain how the apprentice will meet: K9 Company business planning and resource control measures.	<input type="checkbox"/>

Core Skills to be covered in the task	Covered on activity
Please use the space below to provide a summary of the planned practical observation activities for each criteria.	
Explain how the apprentice will meet: S1 Comply with company and industry health, safety and environmental standards, regulations, company operating procedures and working practices relating to the health, safety and environmental practices used within the sector.	<input type="checkbox"/>
Explain how the apprentice will meet:	

Core Skills to be covered in the task	Covered on activity
S2 Ensure that all safety considerations are incorporated and evident in all working practices relating to the preparation and monitoring of safety practices during the observation.	<input type="checkbox"/>
Explain how the apprentice will meet: S4 Produce timely communications providing information to stakeholders both in writing and verbally relating the use and dissemination of information relevant to their job role.	<input type="checkbox"/>
Explain how the apprentice will meet: S8 Use company IT systems to provide accurate and reliable data to support business decisions relating to the use of IT systems and equipment during the course of their job role.	<input type="checkbox"/>
Explain how the apprentice will meet: S11 Uses company risk tools and techniques to evaluate and predict the reliability of engineering systems and equipment relating to the identification and control of risks	<input type="checkbox"/>

Core Behaviours to be covered in the task	Covered on activity
Please use the space below to provide a summary of the planned practical observation activities for each criteria.	
Explain how the apprentice will meet: B1 Health, Safety and Environment - follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the	

Core Behaviours to be covered in the task	Covered on activity
protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information.	<input type="checkbox"/>
Explain how the apprentice will meet: B3 Interpersonal Skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time.	<input type="checkbox"/>
Explain how the apprentice will meet: B5 Risk Awareness - has the embedded desire to reduce risks through systematic monitoring and checking of information identifying mitigation actions on an on-going basis	<input type="checkbox"/>

PLUS Select the Pathway Specialist Skills to be covered in the task	
Pathway: Control Engineer Specialist Skills	Covered on activity
Control Engineer will be observed safely managing a 'network desk', in-line with their Authorisation, in planned and unplanned situations demonstrating the control of network outages and their implications, identifying risks and how they have been minimised.	
Please use the space below to provide a summary of the planned practical observation activities for each criteria.	
Explain how the apprentice will meet: CE1 Remotely control the electrical network, in accordance with operating procedures and safety rules to ensure the safe and efficient operation of the power system	<input type="checkbox"/>
Explain how the apprentice will meet: CE2 Control all outages and network access requests ensuring risks to the network and system security are minimised	<input type="checkbox"/>
Explain how the apprentice will meet: CE3 Manage planned and fault operations and activities on the network to provide a safe and secure electricity supply	<input type="checkbox"/>
Explain how the apprentice will meet: CE4 Undertake work in complex, dynamic and reactive environments and provide technical/operational guidance to the rest of the business	<input type="checkbox"/>
Explain how the apprentice will meet: CE8 Work effectively under appropriate Control Engineer Authorisation in-line with company requirements	<input type="checkbox"/>

Pathway: Electrical Project Engineer Specialist Skills	Covered on activity
Electrical Project Engineer will be observed undertaking engineering activities on a 'live' project demonstrating that it will meet safety, time, budget and stakeholder requirements including how project designs have been implemented, any changes made with the rationale for them and produce final construction plans.	
Please use the space below to provide a summary of the planned practical observation activities for each criteria.	
Explain how the apprentice will meet: EP1 Project manage activities to ensure projects are delivered on time, meet stakeholder and budget requirements	<input type="checkbox"/>
How will the apprentice meet: EP2 Understand and work to project designs and interpret requirements to fit the specific environment the project is being constructed in	<input type="checkbox"/>
How will the apprentice meet: EP3 Manage stakeholder relations and produce final construction plans	<input type="checkbox"/>
How will the apprentice meet: EP5 Be Authorised to work on the electricity network in-line with company/asset owner requirements	

How will the apprentice meet: EP6 Issue, review and communicate to all site personnel the agreed safe systems of works associated with the activities being carried out	
How will the apprentice meet: EP7 Ensure the completion of final hand back documentation to the agreed specifications and timescales	
Pathway: Operational Delivery Engineer Specialist Skills	Covered on activity
Operational Delivery Engineer will be observed working in-line with Authorisation requirements for network, plant and apparatus. Responsible for the planning, management and control of agreed operational and safety requirements in line with specified job tasks to include issue of “safety from the system documentation”, engineering activities and control of working parties. On completion of task return network, plant and apparatus back to the control of the network owner following approved company protocols.	
Please use the space below to provide a summary of the planned practical observation activities for each criteria.	
How the apprentice will meet: OD1 Plan, manage and undertake a range of engineering activities and operations to the electricity network, to meet design, safety, time and commercial requirements	<input type="checkbox"/>
How the apprentice will meet:	

OD2 Be Authorised to work on the electricity network in-line with company/asset owner requirements	
How will the apprentice meet: OD4 Take responsibility for and control others who may be working on the network	<input type="checkbox"/>
How the apprentice will meet: OD5 Issue, review and communicate to all site personnel the agreed safe systems of works associated with the activities being carried out	
How the apprentice will meet: OD6 Ensure the completion of final hand back documentation to the agreed specifications and timescales	
<p>Practical Task Variations - Describe how you can vary this task/s to ensure that the assessment does not become predictable.</p> <p>Variation 1:</p> <p>Variation 2:</p> <p>Variation 3:</p>	

Specific requirements (for example: authorisations/access arrangements/PPE):

Remember:

- The specific detail of the tasks to be undertaken should be **kept confidential from the apprentices**

Practical Task: Include relevant photographs to illustrate task(s)



Energy & Environment Awards Office use only

Date received	
Date signed off	

Appendix E: Practice Practical Observation Template

This document is for use by the person from the employer/training provider playing the role of the assessor during the practice practical observation. It is designed to help replicate the live assessment experience and to enable feedback to be provided to the apprentice.

Full Name of Apprentice	
Location(s) of Practice Practical Observation	
Full Name of Assessor	
Date of Practice Practical Observation	
Start Time	
End Time	
Assessor - Additional comments:	

Please indicate the apprentice's practice practical observation grade (F/P/M/D):	Grade

Please Note:

The Practical Observation is graded out of 100.

Pass: Each criteria must be met to achieve a pass, which will provide 60 marks.

Distinction: All of the Pass criteria must be met and ONE of the criteria from each of the distinction areas, which will provide additional 25 – 40 marks.

Fail: The apprentice does not demonstrate the pass criteria.

K6 Company requirements with regard to project management tools, techniques and processes B3 Interpersonal Skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time.					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Chooses and uses the appropriate company project/engineering management tools, techniques and processes in their project work Uses project management tools to present technical information in a clear and concise manner to sufficient depth for the audience Demonstrates how they can work well with people from different disciplines, backgrounds and expertise to develop their projects 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Demonstrates how they are able to consult and involve appropriate people from other areas to capitalise on different skills/perspectives/experience and/or knowledge to improve the management of their projects Demonstrates how they are able to transmit difficult technical operational information in an understandable manner 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

K9 Company business planning and resource control measures					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Chooses and uses the appropriate company business planning and resource control measures in their work Presents business planning/resource control measures information in a clear and concise manner to sufficient depth for the audience Identifies the risks of inadequate business planning/ resource control measures in their asset project/s Demonstrates they have an embedded desire to reduce risks through systematic monitoring and checking of information on an on-going basis and taking mitigation actions when required 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Demonstrates how they are able to consult and involve appropriate people from other areas to capitalise on different skills/perspectives/experience and/or knowledge to improve the planning process Demonstrates how they are able to transmit difficult planning and/or resource information in an understandable manner 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

S1 Comply with company and industry health, safety and environmental standards, regulations, company operating procedures and working practices

B1 Health, Safety and Environment - follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information

To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> Takes actions to ensure their project work complies with the health, safety and environmental considerations which affect their projects Chooses and uses the appropriate company health, safety and environmental policies and procedures Presents health, safety and environmental information in a clear and concise manner to sufficient depth for the audience Demonstrates how they follow health, safety and environmental policies and procedures in their designs and where necessary challenge unsafe behaviour/practices using appropriate techniques Demonstrates high levels of concentration and the desire to reduce risks through regular monitoring and checking of information in their designs 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Consults and involves appropriate people from other areas to capitalise on different skills/perspectives/experience and/or knowledge to improve the health, safety or environmental arrangements of their operational procedures Assesses the impact of a health, safety or environmental problem and seeks out solutions by making suggestions to remedy or resolve the situation 	<input type="checkbox"/> <input type="checkbox"/>

Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

S2 Ensure that all safety considerations are incorporated and evident in all working practices					
B5 Risk awareness - has the embedded desire to reduce risks through systematic monitoring and checking of information identifying mitigation actions on an on-going basis					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Uses and follows the appropriate company health, safety and environmental policies and procedures • Recognises and identifies specific risks associated with their designs and chooses an appropriate course of action • Presents safety information in a clear and concise manner to sufficient depth for the audience • Demonstrates they have an embedded desire to reduce risks through systematic monitoring and checking of information on an on-going basis and taking mitigation actions when required 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Consults and involves appropriate people from other areas to capitalise on different skills/perspectives/experience and/or knowledge to ensure safety considerations are incorporated into their operational procedure/s • Assesses the impact of an operational problem and seeks out solutions by making suggestions to remedy or resolve the situation safely 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

S4 Produce timely communications providing information to stakeholders both in writing and verbally in relation to their role activities

B3 Interpersonal Skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time

To achieve a Pass the apprentice must achieve ALL of the following:			P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:			D
<ul style="list-style-type: none"> • Presents information in a clear and concise manner to sufficient depth for the audience • Demonstrates that others' views are considered and support, where required, is offered to them • Speaks confidently, listens to others and takes required action to progress work • Demonstrates how they can work well with people from different disciplines, backgrounds and expertise • Demonstrates how they take others' needs and concerns into account and supports them to accomplish an activity safely and on time 			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Communicates effectively with stakeholders to provide operational information in both written and verbal formats to keep them informed • Communicates effectively to transmit complex operational information in an understandable manner 			<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.			Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.				Recording timeline.
Questions <i>Develop some open ended questions</i>							
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded			<input type="checkbox"/>

S8 Use company IT systems to provide accurate and reliable data to support business decisions					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Chooses and uses the appropriate company IT systems, techniques and processes used in their project work Uses IT systems to present information in a clear and concise manner to sufficient depth for the audience 		<input type="checkbox"/> <input type="checkbox"/>			
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

S11 Uses company risk tools and techniques to evaluate and predict the reliability of engineering systems and equipment					
B3 Interpersonal Skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Chooses and uses the appropriate company risk tools and techniques to evaluate and predict the reliability of engineering systems and equipment used in their planning designs Presents all information in a clear and concise manner to sufficient depth for the audience Recognises risks and chooses appropriate action depending on the situation Demonstrates they have an embedded desire to reduce risks through systematic monitoring and checking of information on an on-going basis and taking mitigation actions when required 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Consults and involves appropriate people from other areas to capitalise on different skills/perspectives/experience and/or knowledge to predict the reliability of engineering systems and equipment in their planned operational procedures Assesses the impact of an operational problem and seeks out solutions by making suggestions to remedy or resolve the situation safely 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Pathway: Control Engineer Role Specific Skills

CE1 Remotely control the electrical network, in accordance with operating procedures and safety rules to ensure the safe and efficient operation of the power system

B5 Risk awareness - has the embedded desire to reduce risks through systematic monitoring and checking of information identifying mitigation actions on an on-going basis

To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none">Ensures Health, Safety and Environmental considerations are taken into account and prioritised when carrying out operational proceduresFollows Company policies and procedures for the operational work being undertakenPresents technical information clearly and concisely explaining their plans for conducting operational proceduresDemonstrates they have an embedded desire to reduce risks through systematic monitoring and checking of information on an on-going basis and taking mitigation actions when required		<div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<ul style="list-style-type: none">Consults and involves other control room engineers to safely carry out complex operational procedures and achieve a safe and effective outcomeIdentifies and assesses the impact of an operational problem and seeks out and finds a solution/s to resolve the situation to an effective outcome	<div><input type="checkbox"/></div> <div><input type="checkbox"/></div>
Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.

Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

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CE2 Control all outages and network access requests ensuring risks to the network and system security are minimised					
B1 Health, Safety and Environment - follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Implements the Company Health, Safety and Environmental policies and procedures during the planning and delivery of their operational procedures Follows the correct Company policies / strategies during their operational activities Speaks confidently and listen to others views when taking requests to access the electrical network Demonstrates high levels of concentration and the desire to reduce risks through regular monitoring and checking of information 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Communicates complex operational information in an understandable manner to others reliant on clear and accurate information Identifies and assesses the impact of an operational problem and seeks out and finds a solution/s to resolve the situation to an effective outcome 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

[illegible]

CE4 Undertake work in complex, dynamic and reactive environments and provide technical/operational guidance to the rest of the business

B3 Interpersonal skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time

To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Presents complex technical information to colleagues/field engineers clearly and concisely • Considers the views of others during technical discussions for operational work on the network • Speaks and listens to others views during operational activities and takes the appropriate action/s to conduct their operational procedures • Demonstrates how they work well with people with different disciplines and expertise, taking their needs/concerns into account and supporting them to accomplish activities safely and on time 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Consults and involves other control room engineers to provide technical / operational guidance to safely manage operations on the network • Communicates complex technical operational information in an understandable manner to other control engineers for operations on the network 	<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.		Recording timeline.
Questions <i>Develop some open ended questions</i>				
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded
				<input type="checkbox"/>

CE8 Work effectively under appropriate Control Engineer Authorisation in-line with company requirements					
B3 Interpersonal skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Follows the appropriate Company policy and procedures within the range of their authorisation for control activities on the network Listens and takes others views into consideration when discussing technical matters for network operations Speaks and communicates confidently during operational procedures and takes the required action when required Demonstrates how they work well with people with different disciplines and expertise, taking their needs/concerns into account and supporting them to accomplish activities safely and on time 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Consults and involves other control room engineers to provide support in operational procedures outside of their level of authorisation Passes complex technical information onto more senior authorised control engineers in an understandable manner to allow them to conduct operations on the network 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Pathway: Electrical Project Engineer Role Specialist Skills

EP1 Project manage activities to ensure projects are delivered on time, meet stakeholder and budget requirements B3 Interpersonal skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrates how they use the relevant Company policies and procedures to plan and manage their work • Demonstrates how they can present information in a clear and concise manner with sufficient depth for others • Identifies budget / resource considerations in their project plans and outcomes • Demonstrates how they can work well with people from different disciplines, backgrounds and expertise taking their needs and concerns into account to develop their projects 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to consult and involve appropriate people from other areas to capitalise on different skills / perspectives / experience and / or knowledge to improve their project development / delivery • Demonstrates they are able to assimilate complex project information and transmit it in an understandable manner 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

EP2 Understand and work to project designs and interpret requirements to fit the specific environment the project is being constructed in					
B5 Risk awareness – has the embedded desire to reduce risks through systematic monitoring and checking of information identifying mitigation actions on an on-going basis					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrates how they have ensured their project plans consider health, safety and environmental factors and comply with company policies and procedures • Demonstrates how they can present information in a clear and concise manner with sufficient depth for others • Demonstrates they can speak confidently, listen to others and take the required action • Demonstrates they have an embedded desire to reduce risks through systematic monitoring and checking of information on an on-going basis and taking mitigation actions when required 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to consult and involve appropriate people from other areas to capitalise on different skills / experience and / or knowledge to improve their project development / delivery • Demonstrates they can evaluate and predict the impact of project problems, seek out solutions and make suggestions which result in improvement 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

EP3 Manage stakeholder relations and produce final construction plans					
CB3 Interpersonal skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrates how they can present information in a clear and concise manner with sufficient depth for others • Demonstrates that other views have been taken into consideration and support offered where needed • Demonstrates they can speak confidently, listen to others and take the required action • Demonstrates how they can work well with people from different disciplines, backgrounds and expertise taking their needs and concerns into account to develop their projects 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to resolve conflict/disagreement with stakeholders to reach a positive outcome • Demonstrates they are able to assimilate complex project information and transmit it in an understandable manner to gain project approval/agreement 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

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EP5 Be Authorised to work on the electricity network in-line with company/asset owner requirements					
B1 Health, Safety and Environment – follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrates how they have gathered and analysed information to plan projects which involve the work of third party contractors • Clearly identifies the stakeholders involved in the planned activity, their requirements and the desired outcomes • Demonstrates how they have recognised and defined problems which they have tackled in a logical way, making suggestions for improvement • Demonstrates how they follow health, safety and environmental policies and procedures and where necessary challenge unsafe behaviour using appropriate techniques 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to assimilate complex project / operational information and transmit it in an understandable manner to allow work on the network to be conducted safely • Demonstrates they can assess the impact of potential problems for work on the network, seek out solutions and make suggestions which resolve the situation 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

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EP6 Issue, review and communicate to all site personnel the agreed safe systems of works associated with the activities being carried out

B1 Health, Safety & Environment – follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information

To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrates how they have ensured their project plans consider health, safety and environmental factors and comply with company policies and procedures • Demonstrates they can speak confidently, listen to others and take the required action • Demonstrates how they recognise risks and choose appropriate courses of action to deal with them • Demonstrates high levels of concentration and the desire to reduce risks through monitoring and checking of network information 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to assimilate complex project / operational information and transmit it in an understandable manner to allow work on the network to be conducted safely • Demonstrates they can assess the impact of potential problems for work on the network, seek out solutions and make suggestions which resolve the situation 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

EP7 Ensure the completion of final hand back documentation to the agreed specifications and timescales			
B1 Health, Safety and Environment – follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information			
To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Demonstrates how they have ensured their project plans consider health, safety and environmental factors and comply with company policies and procedures • Demonstrates how they use the relevant Company policies and procedures to complete and finalise their project • Demonstrates they can speak confidently, listen to others and take the required action • Demonstrates how they follow health, safety and environmental policies and procedures and where necessary challenge unsafe behaviour using appropriate techniques • Demonstrates high levels of concentration and the desire to reduce risks through regular monitoring and checking of information 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to assimilate complex project / operational information and transmit it in an understandable manner to allow the network to be operationally returned safely • Demonstrates they can assess the impact of problems for receipt of the network, seek out solutions and make suggestions which resolve the situation 	<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.		Recording timeline.

Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Pathway: Operational Delivery Engineer Role Specific Skills

OD1 Plan, manage and undertake a range of engineering activities and operations to the electricity network, to meet design, safety, time and commercial requirements

B3 Interpersonal skills - works well with people from different disciplines, backgrounds and expertise. Takes others' needs and concerns into account and supports them to accomplish an activity safely and on time

To achieve a Pass the apprentice must achieve ALL of the following:			P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:			D	
<ul style="list-style-type: none">• Demonstrates how they use the relevant Company policies and procedures to plan and manage their work• Demonstrates how they can present information in a clear and concise manner with sufficient depth for others• Identifies budget / resource considerations in their project plans and outcomes• Demonstrates how they can work well with people from different disciplines, backgrounds and expertise taking their needs and concerns into account to develop their projects			<div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<ul style="list-style-type: none">• Demonstrates they are able to consult and involve appropriate people from other areas to capitalise on different skills / perspectives / experience and / or knowledge to improve the outcome / delivery of the operation• Demonstrates they are able to assimilate complex operational information and transmit it in an understandable manner			<div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	
Assessor must ask the following standardised questions.			Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.					Recording timeline.
Questions <i>Develop some open ended questions</i>								
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded			<input type="checkbox"/>	

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OD2 Be Authorised to work on the electricity network in-line with company/asset owner requirements						
B1 Health, Safety and Environment – follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information						
To achieve a Pass the apprentice must achieve ALL of the following:			P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrates how they ensure their planned operations consider health, safety and environmental factors and comply with company policies and procedures • Demonstrates how they use the relevant Company policies and procedures during their planned operations • Demonstrates how they recognise risks and choose appropriate courses of action to deal with them • Demonstrates how they follow health, safety and environmental policies and procedures and where necessary challenge unsafe behaviour using appropriate techniques 			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to consult and involve appropriate people to capitalise on different skills / perspectives / experience and / or knowledge to deliver a successful operational outcome • Demonstrates they are able to assimilate complex operational information and transmit it in an understandable manner 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.			Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>						
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded		<input type="checkbox"/>

OD4 Take responsibility for and control others who may be working on the network					
B5 Risk awareness – has the embedded desire to reduce risks through systematic monitoring and checking of information identifying mitigation actions on an on-going basis					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrates how they have ensured their planned operations consider health, safety and environmental factors and comply with company policies and procedures • Demonstrates how they can present operational information in a clear and concise manner with sufficient depth for others • Demonstrates they can speak confidently, listen to others and take the required action where required • Demonstrates they have an embedded desire to reduce risks through systematic monitoring and checking of information on an on-going basis and taking mitigation actions when required 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to consult and involve appropriate people to capitalise on different skills/perspectives / experience and / or knowledge to deliver a successful operational outcome • Demonstrates they are able to assimilate complex operational information and transmit it in an understandable manner 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

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OD5 Issue, review and communicate to all site personnel the agreed safe systems of works associated with the activities being carried out

B1 Health, Safety and Environment – follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information

To achieve a Pass the apprentice must achieve ALL of the following:			P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:			D	
<ul style="list-style-type: none">• Demonstrates how their planned operational activities consider health, safety and environmental factors and comply with company policies and procedures• Demonstrates they can speak confidently, listen to others and take the required action• Demonstrates how they recognise risks and choose appropriate courses of action to deal with them• Demonstrates high levels of concentration and the desire to reduce risks through monitoring and checking of operational information			<div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<ul style="list-style-type: none">• Demonstrates they are able to assimilate complex operational information and transmit it in an understandable manner to allow work on the network to be conducted safely• Demonstrates they can assess the impact of potential problems for work on the network, seek out solutions and make suggestions which resolve the situation			<div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	
Assessor must ask the following standardised questions.			Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.					Recording timeline.
Questions <i>Develop some open ended questions</i>								
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded			<input type="checkbox"/>	

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OD6 Ensure the completion of final hand back documentation to the agreed specifications and timescales			
CB1 Health, Safety and Environment – follows health, safety and environmental policies and procedures and is prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with teams. Demonstrates high concentration and the desire to reduce risks through regular monitoring and checking information			
To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Demonstrates how their operational plans consider health, safety and environmental factors and comply with company policies and procedures • Demonstrates how they use the relevant Company policies and procedures to complete and finalise network operations • Demonstrates they can speak confidently, listen to others and take the required action • Demonstrates how they follow health, safety and environmental policies and procedures and where necessary challenge unsafe behaviour using appropriate techniques • Demonstrates high levels of concentration and the desire to reduce risks through regular monitoring and checking of information 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates they are able to assimilate complex project / operational information and transmit it in an understandable manner to allow the network to be operationally returned safely • Demonstrates they can assess the impact of problems for receipt of the network, seek out solutions and make suggestions which resolve the situation 	<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.		Recording timeline.

Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Appendix F: Practice Technical Interview Template

This document is for use by the employer/provider person playing the role of the assessor during a practice technical interview. It is designed to help replicate the live assessment experience and to enable feedback to be provided to the apprentice. The practice technical interview must be conducted under examination conditions and recorded. The apprentice must be asked questions.

Apprentice Full Name:					
Employer and location:					
Assessor Full Name:					
Date of Interview:		Start time:		Finish time:	

Please Note:

The Technical Interview is graded out of 100.

Pass: Each criteria must be met to achieve a pass, which will provide 60 marks.

Distinction: All of the Pass criteria must be met and ONE of the criteria from each of the distinction areas, which will provide additional 25 – 40 marks.

Fail: The apprentice does not demonstrate the pass criteria.

K7 Company engineering policies appropriate to their role					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Demonstrate how they have gathered and analysed relevant information to apply the relevant Company engineering policies to their asset projects to achieve workable solutions Explain the link between their asset projects and how they have ensured compliance with the relevant technical specifications Explain how they have used their knowledge of the company engineering policies to support their asset projects to achieve regulatory objectives 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Confidently explains in detail the relevant company engineering policies which support sound engineering principles in their work projects Confidently explains how they have used their knowledge of relevant engineering policies to improve the integrity, safety and longevity of the electrical network in their asset projects 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

K8 Engineering problems including how to identify the problem, gather and analyse all relevant information, provide and implement a workable solution and monitoring its effectiveness

B4 Analysing and solving problems - takes responsibility for solving problems by identifying and analysing the issues and drawing logical, sound solutions that benefit customers and the business

To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D	
<ul style="list-style-type: none">• Demonstrate how they have gathered and analysed relevant information to implement solutions to resolve engineering problems• Explain how they have recognised, and defined problems associated with their work projects• Explain how they have tackled asset issues in a step by step logical way and made suggestions for solving problems which benefit customers and the business• Explain how operational analysis they have undertaken supports the company strategies and policies ensuring compliance with technical requirements		<div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<ul style="list-style-type: none">• Confidently explains how they have resolved engineering problems based on sound principles to improve the integrity / safety / longevity of the network• Explains how they have assessed the effect of differing approaches to resolve engineering problems and made suggestions for improvement		<div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.				Recording timeline.
Questions <i>Develop some open ended questions</i>						
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>	

K9 Company business planning and resource control measures

B6 Planning and Organising - takes a forward looking perspective when considering the delivery of decisions, activities and projects and ensure plans are in place to manage anticipated issues, considers contingency planning

To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> Explain how they have gathered and analysed relevant information in order to implement effective planning solutions or resource requirements in their asset projects Demonstrate how they have linked their asset work to company strategies and policies to ensure compliance with the company business planning and resource control measures Demonstrate how they have developed project plans/designs that contain objectives, budgets, desired outcomes, timescales and evaluation records Explains how they have taken a forward looking perspective when considering delivery planning decisions and ensured that plans are in place to manage anticipated issues, including contingency planning 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Confidently explains the principles of the company's business planning policy and resource control measures and the effect on their work projects Explains how they have used their knowledge of business planning and resource control measures to assess different approaches to their asset projects and made suggestions for improvement 	<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.		Recording timeline.

Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

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S3 Apply asset management, design, planning, control, electrical project, or operational engineering principles as appropriate to their role to maintain and improve the integrity, safety and longevity of the transmission/distribution electrical network

B6 Planning and Organising - takes a forward looking perspective when considering the delivery of decisions, activities and projects and ensure plans are in place to manage anticipated issues, considers contingency planning

To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none">• Explain how they have gathered and analysed relevant information in order to maintain and improve the integrity/safety/longevity of the electrical network• Demonstrate how they have linked their asset work to company strategies and policies to ensure compliance with the company engineering principles• Explain how their engineering asset work supports the business/client to achieve regulatory incentive mechanisms• Explains how they have taken a forward looking perspective when considering the delivery of asset projects and ensured that plans are in place to manage anticipated issues, including contingency planning		<div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div> <div><input type="checkbox"/></div>	<ul style="list-style-type: none">• Confidently discusses and justifies their application of sound engineering principles in their asset projects to improve the integrity, safety and longevity of the electrical network• Demonstrates how they have assessed the impact of differing engineering approaches and made suggestions for improvement in the integrity, safety, or longevity of the electrical network	<div><input type="checkbox"/></div> <div><input type="checkbox"/></div>
Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.

Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

S5 Read, understand and interpret technical information relative to their role, identified in company strategies and policies and work in compliance with technical specifications					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> Explain how they have gathered and analysed relevant information in order to produce asset projects/designs which meet company requirements/ specifications Demonstrate how they have used and interpreted technical Information to develop project plans that contain objectives / budgets / desired outcomes / timescales/evaluation records Demonstrate how they have used technical information to recognise and define design problems which they have tackled in a logical manner 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Demonstrates how they have used technical information to apply engineering principles which have led to improved integrity, safety and longevity of the electrical network Demonstrates how they used technical information to consider the inclusion of new technologies or innovations which have been implemented in their work projects 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

<p>S6 Produce clear and precise reports in relation to their activities to line management, other business departments and/or to external stakeholders</p> <p>B2 Stakeholder management - is proactive in identifying their stakeholders and managing their expectations, presenting appropriate information to them clearly and concisely</p>			
<p>To achieve a Pass the apprentice must achieve ALL of the following:</p> <ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant information in order to produce clear and precise reports in relation to their activities to line management, other business departments and/or to external stakeholders • Explain how their asset reports they have produced link to company strategies and policies • Demonstrate how operational reports/plans they have produced have been used to support internal and/or external stakeholders and meet their requirements • Explain how they have dealt with stakeholder queries/problems in a logical way and made suggestions for resolution which resulted in a benefit to stakeholders/business 	<p>P</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:</p> <ul style="list-style-type: none"> • Demonstrates how they have used their knowledge gained from project monitoring and the evaluation of records to produce clear and precise reports which benefit the business • Discusses reports produced which demonstrate their skills in assessing the impact in different approaches, and provides analysis to support suggestions for improvement 	<p>D</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>
<p>Assessor must ask the following standardised questions.</p>	<p>Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.</p>		<p>Recording timeline.</p>

Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

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S7 Develop and agree project plans to undertake their activities. These plans will contain clear objectives, budgets, desired outcomes and timescales. Also included will be implementation criteria, monitoring process controls and evaluation records

B6 Planning and organising - takes a forward looking perspective when considering the delivery of decisions, activities and projects and ensure plans are in place to manage anticipated issues, considers contingency planning

To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant information in order to develop and agree project plans • Demonstrate how they have developed project plans that contain objectives, budgets, desired outcomes, timescales and evaluation records and where appropriate budgets • Demonstrate how asset plans they have produced have been used to deliver required stakeholder outcomes by following implementation criteria, monitoring process controls and using evaluation records • Explains how they have taken a forward looking perspective when considering the delivery of asset management activities and ensured that plans are in place to manage anticipated issues, including contingencies 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates confidently how they have applied sound engineering principles to develop project plans to undertake projects which contain clear objectives, budgets, desired outcomes and timescales • Discusses project plans produced which demonstrate their skills in assessing the impact in different approaches, and provide analysis to support suggestions for improvement 	<input type="checkbox"/> <input type="checkbox"/>

Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.		Recording timeline.
Questions <i>Develop some open ended questions</i>				
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded
				<input type="checkbox"/>

S9 Demonstrate that their work activities support the business to achieve its regulatory incentive mechanisms					
B2 Stakeholder management - – is proactive in identifying their stakeholders and managing their expectations, presenting appropriate information to them clearly and concisely					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant operational information in order to support the business to achieve its regulatory incentive mechanisms • Explain how their asset projects link to company strategies and policies and support the achievement of regulatory incentive mechanisms • Explain how the company regulatory incentive mechanisms impact/affect relevant stakeholders and their requirements • Identifies the relevant regulatory stakeholders and how the business manage their expectations by presenting appropriate information to them clearly and concisely 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Confidently discusses the company's asset engineering principles and the part they play in supporting the business to achieve its regulatory incentive mechanisms • Confidently explains how the company's inclusion of new technologies and engineering innovations are supporting the business to achieve its regulatory incentive mechanisms 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

S10 Provide information to support business planning processes in relation to their role activities			
B6 Planning and organising - takes a forward looking perspective when considering the delivery of decisions, activities and projects and ensure plans are in place to manage anticipated issues, considers contingency planning			
To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant operational information in order to support the business planning processes in relation to their job role • Demonstrate how they have developed asset plans that support/comply with the business planning processes • Identifies the stakeholders which are affected by the business planning processes and how they are affected • Demonstrate how they have developed asset project plans that take a forward-looking perspective and manage anticipated issues • Explain how their work planning links/supports Company strategies and policies and supports the achievement of regulatory incentive mechanisms • Demonstrate how their asset planning has managed anticipated operational issues and considered contingency planning 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Explains how they have monitoring / evaluated projects produced which has led to learning points to support future planning processes • Discusses project plans produced which demonstrate their skills in assessing the impact in different approaches, and provide analysis to support suggestions for improvement in the planning process 	<input type="checkbox"/> <input type="checkbox"/>

Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Pathway: Control Engineer Role Specific Skill

CE5 Agree and co-ordinate the work of others to maximise network availability and minimise network risks					
B6 Planning & organising – takes a forward looking perspective when considering the delivery of decisions, activities and projects and ensure plans are in place to manage anticipated issues, considers contingency planning					
To achieve a Pass the apprentice must achieve ALL of the following:		P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:		D
<ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant operational information in order to plan and agree the operational work required • Demonstrate how they have developed operational plans that maximise network availability and minimise network risks • Identify the relevant stakeholders required for the operational activity, their requirements and the desired outcomes of the work • Takes a forward looking perspective when considering the delivery of decisions, activities and projects and ensure plans are in place to manage anticipated issues and considers contingency planning 		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Demonstrates how they have used their knowledge gained from the monitoring and the evaluation of operational activities / data to agree and co-ordinate operational activities which demonstrate overall improvement • Demonstrates how they have gathered and analysed information / data and considered differing approaches to operational activities which has led to an improved performance 		<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

CE6 Escalate significant network incidents to the business as appropriate monitoring the real time impacts on the system					
B2 Stakeholder management – is proactive in identifying their stakeholders and managing their expectations, presenting appropriate information to them clearly and concisely					
To achieve a Pass the apprentice must achieve ALL of the following:			P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	
<ul style="list-style-type: none"> Demonstrate how they have gathered and analysed relevant operational information to identify potential network incidents/faults and escalated them in line with operational procedures Identify the relevant stakeholders affected by the potential network incidents/faults and how they will/could be affected Demonstrate how they have dealt with network incidents in a logical way and made suggestions which supported the course of action taken Proactive identifies the relevant stakeholders and manages their expectations, presenting appropriate information to them clearly and concisely 			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> Demonstrates how they have used their knowledge gained from previous network incidents to inform their decisions and allow accurate the reporting to stakeholders Demonstrates how they have gathered and analysed operational information/data to report network incidents and have made suggestions to improve/rectify the situation 	
Assessor must ask the following standardised questions.			Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.		
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

CE7 Ensure interface arrangements and the impact of embedded generation are considered where appropriate			
B4 Analysing and solving problems – takes responsibility for solving problems by identifying and analysing the issues and drawing logical, sound solutions that benefit customers and the business			
To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant operational information in order to make interface arrangements and considered the effects embedded generation where appropriate • Identify the relevant stakeholders affected by the interface arrangements and effects of embedded generation • Demonstrate how they have dealt with interface / embedded generation problems in a logical way and made suggestions which supported the course of action taken • Takes responsibility for solving problems by identifying and analysing the issues and drawing logical, sound solutions that benefit customers and the business 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Confidently explains the company's interface arrangements and the effects and engineering principles of embedded generation on the operational network • Confidently explains how the company's inclusion of new technologies and engineering innovations are used to support network interface arrangements and / or the impact of embedded generation 	<input type="checkbox"/> <input type="checkbox"/>
Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.		Recording timeline.

Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Pathway: Electrical Project Engineer Role Specific Skills

EP4 Undertake contractor management of external parties, agreeing work specifications, variations, and acceptance of work completion in-line with company processes and procedures

B6 Analysing and solving problems – takes responsibility for solving problems by identifying and analysing the issues and drawing logical, sound solutions that benefit customers and the business

To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant information in order to manage contractors / external parties • Identifies the contractors / external parties which were affected by their project and how they gained agreement to achieve the desired outcomes • Explain how they identified and dealt with project problems in a logical way and made suggestions for resolution which resulted in a successful outcome • Takes a forward-looking perspective when considering the delivery of decisions, activities and projects and ensure plans are in place to manage anticipated issues, considers contingency planning 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Confidently explains how they have used the company's engineering principles/policies to agree and manage the work of contractors/external parties in their work projects • Discusses projects produced which demonstrate their skills in assessing the impact of different approaches to resolve problems and agree the work of contractors/external parties 	<input type="checkbox"/> <input type="checkbox"/>

Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Pathway: Operational Delivery Engineer Role Specific Skills

OD3 Understand and take control of reactive activities including testing, inspection and maintenance of appropriate plant and equipment to meet operational requirements B4 Analysing and solving problems – takes responsibility for solving problems by identifying and analysing the issues and drawing logical, sound solutions that benefit customers and the business			
To achieve a Pass the apprentice must achieve ALL of the following:	P	To achieve a Distinction the apprentice must achieve a minimum of ONE of the following:	D
<ul style="list-style-type: none"> • Demonstrate how they have gathered and analysed relevant information in order to make operational decisions • Explain how their operational activities link to the company strategies and policies and how they ensure compliance with technical specifications • Explain how they have identified and dealt with network problems in a logical way and made suggestions or taken action which has led to a successful outcome • Takes responsibility for solving problems by identifying and analysing the issues and drawing logical, sound solutions that benefit customers and the business 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<ul style="list-style-type: none"> • Confidently explains how they have used the Company's engineering principles/policies to plan and manage their operational projects to improve the integrity, safety or longevity of the network • Discusses projects produced which demonstrate their skills in assessing the impact of different approaches to resolve operational problems and make suggestions for improvement 	<input type="checkbox"/> <input type="checkbox"/>

Assessor must ask the following standardised questions.		Assessor must record all additional questions asked for clarification and the responses provided by the apprentice including examples.			Recording timeline.
Questions <i>Develop some open ended questions</i>					
Fail Awarded	<input type="checkbox"/>	Pass Awarded	<input type="checkbox"/>	Distinction Awarded	<input type="checkbox"/>

Appendix G: Work Log Mapping Document

Introduction

Throughout the on-programme part of the apprenticeship, the apprentice will need to compile a work log of evidence to support the requirements of the technical interview which is based on the work log. The evidence within the work log will need to be mapped using the work log mapping document by the apprentice to the KSB requirements, and this would normally come from the evidence relating to at least 5 holistic jobs.

The independent assessor will use the work log mapping document to review the evidence in the apprentice's work log in preparation for the technical interview.

The work log mapping document below consists of the core requirements and specialist skills.

Apprentices next steps

1. Complete all the details on the first page and include employer details of where relevant competencies from their experience at work was gained.
2. Ensure each piece of evidence is signed off by their tutor/supervisor/mentor and training provider. The apprentice can use a number of different types of evidence to demonstrate their competence as described in Section 5 of the Specification – 'What to include in the portfolio of evidence'. For further guidance, the apprentice must seek advice from their tutor/supervisor/mentor and training provider.
3. Map evidence to the criteria in the following pages using a referencing system indicating where the evidence for the criteria is located in the portfolio e.g., work based evidence Job 1 (J1) page 5 paragraph 2. This will allow the independent assessor, appointed by Energy & Environment Awards to locate the section or specific piece of evidence being discussed and referred to during the interview.

4. Place the work log mapping document at the front of the work of evidence.

The apprentice's training provider must make arrangements for Energy & Environment Awards to have access to the apprentice's work log including the portfolio mapping document at Gateway. For those using e-portfolios such as ONEFILE or SMARTASSESSOR the reference used must simply be the file or folder name you used when uploading the evidence to such systems.

Work Log Mapping Document

This document must be placed at the front of the work log and submitted to Energy & Environment Awards with the work log of evidence.

Mapping Sign off on Completion:

Apprentice Full Name (Print)	Apprentice Signature	Training Provider (Company)	Training Provider Full Name of Signatory	Date of Sign Off

Core Knowledge

Ref.	Apprenticeship Standard Criteria	WORK LOG REVIEW (Apprentice Input)		
		1	2	3
K7	Company engineering policies appropriate to their role			
K8	Engineering problems including how to identify the problem, gather and analyse all relevant information, provide and implement a workable solution and monitoring its effectiveness			
K9	Company business planning and resource control measures			
Assessor Comments:				

Core Skills

Ref.	Apprenticeship Standard Criteria	WORK LOG REVIEW (Apprentice Input)		
		1	2	3
S3	Apply asset management, design, planning, control, electrical project, or operational engineering principles as appropriate to their role to maintain and improve the integrity, safety and longevity of the transmission/distribution electrical network			
S5	Read, understand and interpret technical information relative to their role, identified in company strategies and policies and work in compliance with technical specifications			
S6	Produce clear and precise reports in relation to their activities to line management, other business departments and/or to external stakeholders			
S7	Develop and agree project plans to undertake their activities. These plans will contain clear objectives, budgets, desired outcomes and timescales. Also included will be implementation criteria, monitoring process controls and evaluation records			
S9	Demonstrate that their work activities support the business to achieve its regulatory incentive mechanisms			
S10	Provide information to support business planning processes in relation to their role activities			
Assessor Comments:				

Core Behaviours

Ref.	Apprenticeship Standard Criteria	WORK LOG REVIEW (Apprentice Input)		
		1	2	3
B2	Stakeholder management			
B4	Analysing and solving problems			
B6	Planning and Organising			
Assessor Comments:				

Pathway: Control Engineer Role Specific Skills

Ref.	Apprenticeship Standard Criteria	WORK LOG REVIEW (Apprentice Input)		
		1	2	3
CE5	Agree and co-ordinate the work of others to maximise network availability and minimise network risks			
CE6	Escalate significant network incidents throughout the business as appropriate (monitoring of real time impacts on the system)			
CE7	Ensure interface arrangements and the impact of embedded generation are considered where appropriate			
Assessor Comments:				

Pathway: Electrical Project Engineer Role Specific Skills

Ref.	Apprenticeship Standard Criteria	WORK LOG REVIEW (Apprentice Input)		
		1	2	3
EP4	Undertake contractor management of external parties, agreeing work specifications, variations and acceptance of work completion in-line with company processes and procedures			
Assessor Comments:				

Pathway: Operational Delivery Engineer Role Specific Skills

Ref.	Apprenticeship Standard Criteria	WORK LOG REVIEW (Apprentice Input)		
		1	2	3
OD3	Understand and take control of reactive activities including testing, inspection and maintenance of appropriate plant and equipment to meet operational requirements			
Assessor Comments:				

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