

Skills for a greener world

EPA Supporting Documents for

Level 3 Maintenance and Operations Engineering Technician (Plant Operations) QAN 603/7266/7













EPA Supporting Documents for

Level 3 Maintenance and Operations Engineering Technician (Plant Operations)

QAN 603/7266/7

Updates to the supporting documents	3
Appendix A: Glossary	4
Appendix B: Gateway Eligibility Form	5
Appendix C: Practice Knowledge Assessments: Plant Operations	8
Appendix D - Practical Observation and Planning Form	25
Appendix E: Practice Practical Observation Template	30
Appendix F: Practice Technical Interview Template	55
Appendix G: Portfolio Mapping Document	73



Updates to the supporting documents

Since the first publication of the EUIAS Maintenance and Operations Engineering Technician Supporting Documents – Plant Operations, the following updates have been made.

Version	Date first published	Section updated	Page(s)
v3.0	2023	Appendix C: Sample Answer Sheet	24
		Appendix G: Replaced (Assessor Use Only) with (Apprentice Input)	74 - 77
		Footer for V2.0 below stated V3.0 this has been removed. This version is v3.0	All
V2.0	2023	New template and rebranded	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 endpoint 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 'knowhow' 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: ST0154 version 1.2; Assessment Plan Version: ST0154/AP02)

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	Y / N
the end-point assessment for this apprenticeship standard with any	
other End Point Assessment	
Organisation?	
If "Yes" please give details:	

Apprentice's details

Eligibility requirements:

The apprentice must confirm their achievement of the following:

Eligibility requirement	Achieved by the apprentice? Y/N	Evidence (Scans of certificates MUST be included)
Achieved Level 2 English		



Achieved Level 2 Maths	
Satisfactory completion of the formal training plan agreed with apprentice by the employer	
Compiled and submitted a portfolio of evidence, on which the technical interview will be based on	

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 EUIAS.
- 2. The apprentice will only submit their own work as part of end-point assessment.
- 3. All parties agree that end-point assessment evidence may be recorded and stored by EUIAS for quality assurance purposes.
- 4. The apprentice has been on-programme for a minimum duration of 365 days.
- 5. The apprentice has achieved English and maths Level 2 as detailed in this document.
- 6. The apprentice satisfactorily completed a formal training plan agreed by the employer.
- 7. The apprentice has produced compiled and submitted a portfolio of evidence, on which the technical interview will be based on.
- The apprentice, if successful, gives permission for EUIAS 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 the EUIAS Appeals Policy and Complaints Policy.
- 10. The employer/training provider has given the EUIAS 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 EUIAS, 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:

EUIAS use only:	
EUIAS Sign off:	
Comments/actions:	



Appendix C: Practice Knowledge Assessments: Plant Operations



Level: 3

Maintenance and Operations Engineering Technician

Pathway: Plant Operations

Paper Code: Practice Paper

This examination consists of 30 multiple-choice questions.

The Pass mark is 18 correct answers.

The Merit mark is 23 correct answers.

A merk of 26 or more is a Distinction.

The duration of this examination is 45 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.

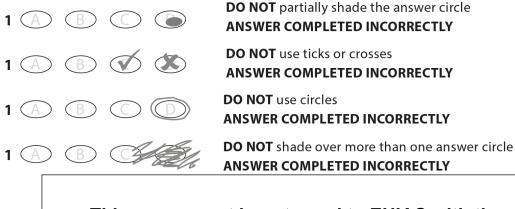
For each question, fill in ONE answer ONLY.

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:

- 1 (A) (B) (C) (D)
- ANSWER COMPLETED CORRECTLY

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



This paper must be returned to EUIAS with the apprentice answer sheets.



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



On what type of installation would a technician fit this design of washer?

Possible answers		
a)	High corrosion	
b)	High temperature	
c)	High vibration	
d)	High pressure	



Questi	Question 2			
When c	When checking the pressure of a system the maintenance schedule stipulates that			
the sys	the system pressure should be 10 bar with a tolerance of +/- 0.05 bar, what are the			
minimu	minimum and maximum acceptable pressures?			
Possib	Possible answers			
a)	9.95 to 10.05 bar			

ч)		
b)	9.5 to 10.5 bar	
c)	9.05 to 10.5 bar	
d)	9.005 to 10.005 bar	

Question 3		
Safety critical equipment should be maintained:		
Possible answers		
a)	every twelve months	
b)	more frequently than non-safety critical equipment	
c)	less frequently than non-safety critical equipment	
d)	at the same period as safety non-critical equipment	



Question 4Which statement best describes what is meant by the terminology "specification"?Possible answersa)The capacity to endure continuous forceb)The standard when measured against another object of similar designc)Detailed description of the design and materials of an objectd)The specified point beyond which certification is invalid

Question 5			
What typ	What type of maintenance is applied when something stops working?		
Possible answers			
a)	Planned		
b)	Preventative		
c)	Corrective		
d)	Shutdown		

Question 6		
What do the initials IP followed by 2 numbers refer to when seen on a piece of equipment?		
Possible answers		
a)	Internal pressure	
b)	Integrity protection	
c)	Ingress protection	
d)	Increased pressure	



Question 7Which of the following is commonly classed as safety critical?Possible answersa)Control valveb)Fusec)Steam trapd)Drain valve

Question 8			
What do	What does the coloured tag on a piece of rigging equipment mean?		
Possible	Possible answers		
a)	Certification period		
b)	Safe working load		
c)	Maximum working load		
d)	Safe to use		

Question 9		
When seen on site, what does a green safety sign signify?		
Possible answers		
a)	Mandatory	
b)	Prohibited	
c)	Information	
d)	Warning	



Question 10		
What document should be fixed to a scaffold before a technician uses it?		
Possible answers		
a)	Risk assessment	
b)	Safety certificate	
c)	Approved Scafftag	
d)	Permit to work	

Looking at the image provided and taking into consideration risk, which task would a technician say is low probability and low in impact?

Possibl	e answers	A.	B. ●	
a)	A	×		
b)	В	C .	<u>AAA AAA AAA</u>	
c)	С	<u>نگ</u>	<u>×</u>	
d)	D		ΔΔΛ	

[Turn to the next page for question 12]



Question 12		
When personal protection equipment is identified on the work control document, which of the following statements is correct?		
Possible answers		
a)	PPE is recommended	
b)	PPE is available	
c)	PPE is good practice	
d)	PPE is mandatory	

Questio	n 13	
In accordance with HSE regulations, how would a technician know if a substance		
was regarded as hazardous?		
Possible answers		
a)	The container will be coloured red	
b)	It will be contained in a glass receptacle	
c)	It will have a label identifying the hazard	
d)	It will give off a strong odour	

Question 14		
According to the Confined Space Regulations 1997, which of the following locations is not regarded as a confined space?		
Possible answers		
a)	Storage tank	
b)	Termination cabinet	
c)	Floor void	
d)	Pipe trench	

EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Documents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills

Page 15



Question 15In accordance with HSE guidelines, isolations can only be applied by:Possible answersa)competent peopleb)training and authorised peoplec)skilled peopled)experienced people

Questio	n 16	
Which m	Which manual handling statement is true?	
Possible answers		
a)	Correct manual handling prevents all accidents	
b)	Correct manual handling prevents damage to equipment	
c)	Correct manual handling reduces the risk of human injury	
d)	Correct manual handling should only be applied in the workplace	

[Turn to the next page for question 17]



Using the half split principle and referring to image below, at which position should a technician make the next check when fault finding?

	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Possible	e answers
a)	Point C
b)	Point F
c)	Point G
d)	Point I

Question 18		
What regulation provides guidance on the use of handheld tools?		
Possible answers		
a)	PUWER	
b)	COMAR	
c)	LOLER	
d)	COSHH	



Question	19
----------	----

What is being measured in this image?

Possib	le answers	
a)	Temperature	
b)	Vibration	
c)	Pressure	
d)	Speed	

Question 20		
When seen on a British Standard Piping and Instrumentation drawing, what does		
this symbol represent?		
Possible answers		
a)	Electrical signal	
b)	Pneumatic signal	// // // //
c)	Hydraulic signal	
d)	Instrument signal	



What type of maintenance can be applied to check the long-term performance of equipment to identify problems before they occur?

Possible answers	
a)	Preventative
b)	Risk based
c)	Condition based
d)	Corrective

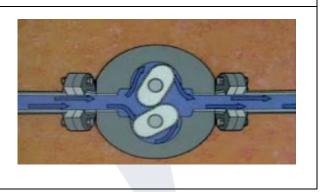
C	Questio	tion 22	
N	What service does this device apply to process fluids?		
F	Possible	answers	
	a)	Pressure drop	
	b)	Filtration	
	c)	Temperature exchange	
	d)	Mixing	

Question 23

What operating principle is used here to measure the rate of flow?

Possible answers

a)	Differential pressure
b)	Positive displacement
c)	Venturi effect
d)	Bourdon tube





The terminology LO/LC is often used when applying which set of procedures?

Possible answers		
a)	Inhibit/override	
b)	Isolation	
c)	Risk assessment	
d)	Manual handling	

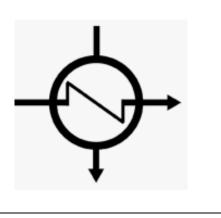
Questio	uestion 25	
What eff pipeline	/hat effect does a Non Return Valve (NRV) have when located in a process ipeline?	
Possible	e answers	
a)	a) Releases pressure at a given set point	
b)	Acts as a self-regulating pressure control valve Restricts flow to one direction only	
c)		
d)	Aerates the fluid flowing through the pipework	

Questio	Question 26		
Which ONE of the following statements best defines the terminology "viscosity"?			
Possibl	le answers		
a)	The degree of compactness of a substance		
b)	A substance that has no fixed shape		
c)	The state of being thick in consistency		
d)	Firm and stable in shape		



When seen on a piping and instrument drawing what does this symbol represent?

Possible answers		
a)	Electric heater	
b)	Heat exchanger	
c)	Check valve	
d)	Pressure safety valve	

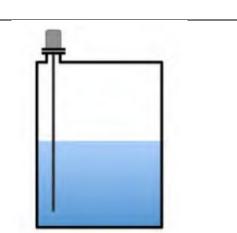


Questio	Question 28		
If fluid A	has a higher specific gravity than fluid B and they are both contained in		
the same	e environment, which statement is true?		
Possible	e answers		
a)	Both liquids will mix together		
b)	Fluid B will gravitate to below fluid A		
c)	Fluid A will gravitate to below fluid B		
d)	An explosive atmosphere will be created		



What operating principle does this instrument use to measure the level in the vessel?

Possible answers		
a)	Differential pressure	
b)	Ultrasound	
c)	Radio waves	
d)	Capacitance	



Question 30			
A pump	A pump is showing symptoms of higher than normal levels of both noise and		
vibration	vibration. What would commonly be the cause of this condition?		
Possible	e answers		
a)	Increased pressure in line		
b)	Blockage in the discharge line		
c)	Higher than normal temperatures		
d)	Cavitation in pump		

End of Questions



Practice Knowledge Assessment

Plant Operations- Answer scheme

Question	Answer
1	С
2	A
3	В
4	С
5	C C
6	С
7	В
8	А
9	С
10	С
11	A
12	D
13	С
14	В
15	В

C C
С
А
В
В
С
В
А
С
С
С
В
С
D
D



SAMPLE ANSWER SHEET



Candidate ID	Attempt	
		and the second
Exam Date		
Centre Name		and the second second
Centre Number		
MARKING INSTRUCTIONS		
Answers should be completed us	sing a HB pencil.	
O O O ● ANSWER COMPL	ETED CORRECTLY	
Examples of how NOT to mark your	r examination sheet. These will not be recorded	
O O O O DO NOT partially s	shade the answer circle.	
○ ○ ② ⑧ DO NOT use ticks	or crosses.	
O O O DO NOT use circle	es.	
⊙ ⊙ ● ● DO NOT shade ov	ver more than one circle.	
10000	21 0 0 0 0	
20000	22 0 0 0 0	
30000	23 0 0 0 0	
40000	24 0 0 0 0	
50000	25 0 0 0 0	
60000	26 0 0 0	
70000	27 0 0 0 0	
80000		
9000	29 0 0 0 0	
10 0 0 0 0	30 0 0 0 0	
11 0 0 0 0		
12 0 0 0 0		
13 0 0 0 0		
14 0 0 0 0		
15 0 0 0 0		
16 0 0 0 0		
17 0 0 0 0		
18 0 0 0 0		
19 0 0 0 0		
20 0 0 0 0		



Appendix D - Practical Observation and Planning Form

The practical observation must be designed to meet the requirements of the Maintenance and Operations Engineering Technician standard.

- The apprentice will complete a practical observation during which they will be asked questions by the assessor to confirm their understanding of the rationale for actions taken and choices made during the practical observation
- The content of this practical observation will relate to the specific role they are working towards
- The duration of this activity will typically be no longer than one day and the actual time allowed will be based on the comparable time that an industry competent worker would take to achieve successful task(s) completion
- The employer/training provider must devise a practical observation task(s) sufficiently complex to allow the apprentice to demonstrate the required knowledge and skills

Note that the apprentice is only required to demonstrate the main specialist specific skill covered by the practical, and the observation task must be chosen carefully to ensure that the apprentice has opportunity to cover all aspects of the skill.

The activities will need to be able to provide the evidence identified in the checklist in the form below.

The EUIAS offer an optional service to review the employer/training provider's practical assessment design. To do this complete the 'Level 3 Practical Observation and Planning Form' and submit to the Service Delivery team, for review 1 month before the start of the end-point assessment.



Level 3 Practical Observation and Planning Form

Employer name and site address Training provider (if	
applicable) name and site	
address	
Standard	Maintenance and Operations Engineering
	Technician
Pathway	Plant Operations
Level	3
Location of practical	
Contact Details:	
Employer/training provider	
representative, email address and	
contact number overseeing the	
setup of the practical (documents and site).	
EUIAS Date of review:	

Description of the proposed complex task(s):

Special requirements (for example: access arrangements and PPE):

Equipment/tools required:	Resources required:



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 Skills	Covered on activity
S1 Comply with industry health, safety and environmental working practices and regulations	
S2 Communicate with and provide information to stakeholders in line with personal role and responsibilities	
S3 Prepare work areas to undertake work related activities and reinstate those areas after the completion of the work-related activities	
S4 Assess and test the performance and condition of plant and equipment	
S5 Locate, and rectify faults on plant and equipment	
S6 Read, understand and interpret information and work in compliance with technical specifications and supporting documentation	
S7 Inspect and maintain appropriate plant and equipment to meet operational requirements	
S8 Communicate, handover and confirm that the appropriate engineering process has been completed to specification	
Core Behaviours	Covered on activity
B1 Health and Safety - Follows health and safety policies and procedures and be prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with appropriate supervision	
B2 Quality focused - Ensures that work achieves quality standard both occupationally and personally	
B3 Working with others - Has the ability to work well with people from different disciplines, backgrounds and expertise to accomplish an activity safely and on time	
B4 Interpersonal skills - Gets along well with others and takes into account their needs and concerns	



B6 Sustainability and ethical behaviour - Behaves ethically and undertakes work in a way that contributes to sustainable development	
B7 Risk awareness - Demonstrates high concentration, the desire to reduce risks, ability to be compliant and awareness of change, through regular monitoring and checking of information	
PLUS select the MAIN Specialist Skill covered by the practical	Covered on activity
Pathway: Plant Operations Specialist Skills	
PO1 Carry out planned operating procedures on plant and equipment	
PO2 Monitor the performance of the plant and equipment	
PO3 Handover and accept responsibility for plant and equipment	
Estimated total duration of practical (must be a minimum of 4 hours)	

Remember:

- The specific detail of the tasks to be undertaken should be **kept confidential from the apprentices**
- You will require differing tasks where you have more than one apprentice to be assessed

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



EUIAS 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 pra	actical observation
grade (F/P/M/D):	

Please Note:

Pass: Each criteria must be met to achieve a pass.

Merit or Distinction: All Pass criteria must be achieved PLUS a minimum number of merit and distinction as described in Section 3 in this specification.

Fail: The apprentice does not demonstrate the pass criteria.



S1 Comply with industry health, safety and environmental working practices and regulations			
Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	 Distinction Criteria – Minimum two to be met 	
 Demonstrate a clear understanding of their own health, safety and environmental responsibilities and that of others Comply with the required health, safety and environmental working practices and regulations Conduct a suitable risk assessment and proactively identify workplace hazards Inspect and wear the correct personal protective equipment (PPE) required to carry out the activity Inform other relevant parties of matters affecting them where required 	 Demonstrate a deeper understanding of the health, safety and environmental implications of the work e.g. potential effect of failure to comply, environmental, social, financial, company impact Take a lead role in managing the site safety of self and others Consistently demonstrate compliance with safety requirements and make suggestions to reduce risks Identify poor/bad practice in relation to work activities and address the situation 	 Demonstrate exemplary health, safety and environmental knowledge and performance throughout the activity Identify health, safety and environmental deficiencies and implement appropriate solutions Challenge unsafe behaviour/ practices using appropriate techniques Pre-empt risks prior to task commencement and puts actions in place to prevent them occurring Demonstrate the ability to take a lead in accepting additional responsibility and autonomy to improve safety standards 	





Comply with and apply safe systems of work and maintain a safe working environment						
 Inspect and use the appropriate tools and equipment 						
 Regularly re-assess the site conditions and take action when necessary to maintain site safety 						
 Check to ensure the site is left in a safe/secure condition for others 						
Assessor must ask the following standardised questions.		Assessor must record all additional of for clarification and the responses prapprentice including examples.	•	Recording timeline.	Mark award	ed.
Questions Develop some open ended question	ns					





S	S2 Communicate with and provide information to stakeholders in line with personal role and responsibilities							
P	Pass Criteria – All to be met		Merit Criteria – Minimum two to be	Distinction Criteria – Minimum two to				
			met		be met			
•	a range of technical information provided to plan and conduct the work		 Demonstrate a detailed knowledge of the range and purpose of the technical information available Identify inaccuracies/deficiencies in the technical information provided and resolve/report the situation Challenge in a professional manner any areas of concern to clarify understanding Identify/suggest methods of improving the system/use of information 		 Demonstrate their ability to effectively communicate technical information across a wide range of stakeholders e.g. colleagues, management, briefings/meetings, external clients Consult and involve team members and/or other relevant persons to achieve greater understanding and improved performance Demonstrate the ability to build positive relationships and actively address conflict with positive outcomes 			
•	Complete any technical or supporting documentation in							



EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Docuents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills

Page 33



line with company policies/procedures					
Assessor must ask the following standardised questions.		Assessor must record all additional qu for clarification and the responses pro apprentice including examples.	Recording timeline.	Mark awaro	ded.
Questions					
Develop some open ended question	ns				

62 D

ENERGY & UTILITY SKILLS

Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met		
 Demonstrate an understanding of the importance of good preparation and the potential outcomes of poor preparation Inspect and prepare the work area and equipment to 	 Take a lead role in the preparation of the work area proactively informing others on matters which affect them Produce a detailed work plan to support the organisation of the work, including measures to deal with contingencies 		 Demonstrate a deeper understanding of the implications of good and poor work preparation. e.g. In terms of cost, time, value, company reputation etc Demonstrate the ability to take a lead in accepting additional 	
be worked on in line with company policies/procedures	 Demonstrate their ability to develop positive professional 		responsibility and autonomy to achieve/improve the work being undertaken	

EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Docuents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills

Page 34



•	Identify and implement any special precautions required		relationships with individuals to support the work activity				
	by the work activity or environment, where required		 Make valid suggestions/ recommendations to improve 				
•	Maintain good housekeeping practices and a safe working environment throughout the activity		the planning/preparation of the work activity				
•	Store tools, equipment, materials in a suitable/secure position and dispose of waste products in line with company policies and Health Safety and Environmental regulations Reinstate the work area to ensure it is left in a safe and secure condition e.g. locks,						
	notices, documentation Assessor must ask the following standardised questions.		Assessor must record all additional for clarification and the responses apprentice including examples.	-	Recording timeline.	Mark awarc	led.





Questions
Develop some open ended questions

S4 Assess and test the performance and condition of plant and equipment						
Pass Criteria – All to be met		Merit Criteria – Minimum two to be met		Distinction Criteria – Minimum two to be met		
 Demonstrate a clear understanding of the company polices/procedures for the assessment and testing of plant and equipment to be worked on Demonstrate a clear understanding of the types and purpose of testing procedures for the plant and equipment to be worked on Assess and test the plant/ equipment to be worked on in line with company 		 Demonstrate a detailed technical knowledge of the range of tests available and their specific purpose Take a pro-active, leading role in the testing activity providing clear guidance on the results obtained Make recommendations/ suggestions to improve testing efficiencies Demonstrate a detailed technical knowledge of the outcome of testing procedures 		 Demonstrate a deeper technical understanding of testing procedures and the analysis of results. e.g. testing parameters, performance indicators etc. Demonstrate the ability to take a lead in accepting additional responsibility and autonomy to achieve/improve the work being undertaken 		
proceduresUse the correct tools,		and the implications of results obtained				
equipment and techniques						





 to conduct testing in line with company procedures Accurately interpret the results of the tests conducted 						
 Record/report the results of the testing in line with company procedures 						
Assessor must ask the following standardised questions.		Assessor must record all additional of for clarification and the responses prapprentice including examples.	•	Recording timeline.	Mark awar	
Questions Develop some open ended question	ns					

Pass Criteria – All to be met				Distinction Criteria – Minimum two to be met		
 Demonstrate a clear understanding of their role and responsibilities for the fault location and 		 Demonstrate a detailed understanding of the theory and principles of fault location and rectification operations 		 Demonstrate deeper technical knowledge of fault location and fault prevention e.g. costs, lost time, sustainability of 		
rectification activity to be undertaken				equipment, company reputation		

© 2023 Energy & Utility Skills



- Provide an accurate technical explanation of the company's fault location methods, processes and/or procedures
- Competently use the correct tools, equipment and methods to locate the rectify the fault/s in a timely manner
- Conduct the work in compliance with all relevant regulatory requirements and company policies and procedures
- Complete the required tests/checks to confirm the fault rectification has been successful
- Record the results/outcomes of rectification work in line with company requirements

- Demonstrate a detailed understanding of cause and effect of faults and preventative measures
- Pro-actively works with others to identify areas for improvement and follows through on agreed implementation

 \square

 Make recommendations/ suggestions to improve the location/rectification work activity Identify and implement tangible changes that improve the efficiency of the work being conducted

 \square

- Identify and take action to report or deal with issues of nonconformity/compliance
- Demonstrate the ability to take a lead in accepting additional responsibility and autonomy to achieve/improve the work being undertaken



 \boxtimes



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.	Mark awarded.
Questions			
Develop some open ended questions			

Pass Criteria – All to be met	 Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met
 Read and correctly interpret a range of technical information provided to plan and conduct the work 	• Demonstrate a detailed knowledge of the range and purpose of the technical information available	
 Demonstrate a clear understanding of the purpose and use of the technical information provided for the work 	 Identify inaccuracies/deficiencies in the technical information provided and resolve/report the situation 	
 Use and refer to the technical information provided to check/confirm the work conducted meets 	 Challenge in a professional manner any areas of concern to clarify understanding 	

ENERGY & UTILITY SKILLS



standardised questions.	for clarification and the responses apprentice including examples.	-		timeline.	awarded.
Assessor must ask the following	Assessor must record all additionation	al du	lestions asked	Recording	Mark
Complete any technical or supporting documentation in line with company policies/procedures					
 Where necessary, question/clarify any information which is not clearly understood 	information				
the required company standards/specifications	 Identify/suggest methods of improving the system/use of 				

S7 Inspect and maintain appropriate plant and equipment to meet operational requirements								
Pass Criteria – All to be met		Merit Criteria – Minimum two to be	Distinction Criteria – Minimum two to					
		met	be met					
 Demonstrate a clear understanding of the company polices/procedures for the inspection of plant 		Demonstrate a detailed technical knowledge of the range of required inspections		 Demonstrate a deeper technical understanding of inspection/maintenance operations. e.g. In terms of 				

ENERGY & UTILITY SKILLS



and equipment to be worked on

- Demonstrate a clear understanding of the company polices/procedures in relation to achieving the safe isolation of equipment from relevant sources of energy
- Identify and inspect the plant/equipment to be worked on in line with company procedures
- Correctly use tools, equipment and techniques to achieve the quality standards required by company policies/procedures
- Demonstrate consistent application of policies and procedures during the work activity

and maintenance procedures cost, time, environmental and their specific purpose impact, sustainability etc Pro-actively works with others Demonstrate the ability to take ٠ \square • a lead in accepting additional to identify areas for improvement and follows responsibility and autonomy to achieve/improve the work through on agreed implementation being undertaken Demonstrate the ability to ٠ develop positive professional relationships with individuals to support the work activity Identify areas for work improvement and implement actions to improve work efficiencies





Record/report the results of the inspection in line with company procedures				
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.	Mark awarded.
Questions				
Develop some open ended questions				





Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	•	Distinction Criteria – Minimum two to be met		
 Demonstrate a clear understanding of their role and responsibilities in returning the system/equipment back to 	Demonstrate a detailed understanding of the factors which can support and influence a smooth handover of equipment		• Demonstrate the ability to take a lead in accepting additional responsibility and autonomy to achieve/improve the handover process		
 operational service Provide an accurate technical explanation of the company's handover procedure 	 Take a pro-active lead in effectively communicating the detail of handover arrangements with stakeholders 		 Consult and involve team members and/or other relevant persons to achieve greater understanding and improved performance 	[
 Complete the required checks/tests to confirm the equipment meets the company operational requirements for handover 	 Demonstrate their ability to develop positive professional relationships with individuals to support handover process Confidently lead the handover 		 Demonstrate the ability to build positive relationships and actively address conflict/resolve problems with positive outcomes 	[
 Conduct the handover in compliance with all relevant policies and procedures Clearly communicate the details of the handover including any additional 	 process taking charge of the operation and resolving any issues within their role responsibility Adapts the method and style of communications to 		 Demonstrate their ability to effectively communicate technical information across a wide range of stakeholders e.g. colleagues, management, briefings/meetings, external clients 	[



requirements to the relevant parties		changing circumstances and need			
Complete all relevant reporting/recording documentation in line with company procedures					
Leave the work area in a safe/secure condition for others					
Assessor must ask the following standardised questions.		Assessor must record all additiona for clarification and the responses apprentice including examples.	-	Recording timeline.	Mark awarded.
Questions					
Develop some open ended questions	S				

B1 Health and Safety								
Pass Criteria – All to be met		Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met					
 Follows health and safety policies and procedures and be prepared to challenge unsafe behaviour using appropriate techniques to 								





ensure the protection of people and property when working alone and/or with appropriate supervision			
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.	Mark awarded.
Questions			
Develop some open ended questions			

B2 Quality focused					
Pass Criteria – All to be met		Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met		
 Ensures that work achieves quality standard both occupationally and personally 					
Assessor must ask the following standardised questions.		Assessor must record all additional qu for clarification and the responses pro- apprentice including examples.		Recording timeline.	Mark awarded.





t Criteria – Minimum two to be	Distinction Crite be met	eria – Minimu	m two to
essor must record all additional qu larification and the responses pro entice including examples.		Recording timeline.	Mark awardec
	prentice including examples.		

B4 Interpersonal skills		
Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met





 Gets along well with others and takes into account their needs and concerns 				
Assessor must ask the following standardised questions.	9	Assessor must record all additional questions ask for clarification and the responses provided by the apprentice including examples.	•	Mark awarded.
Questions				
Develop some open ended question	ons			

B6 Sustainability and ethical behaviour							
Pass Criteria – All to be met	Merit Criteria – Minimum two to be Disting met be met	ction Criteria – Minimum two to					
 Behaves ethically and undertakes work in a way that contributes to sustainable development 							
Assessor must ask the following standardised questions.	Assessor must record all additional questions for clarification and the responses provided by apprentice including examples.						
Questions							
Develop some open ended questions							





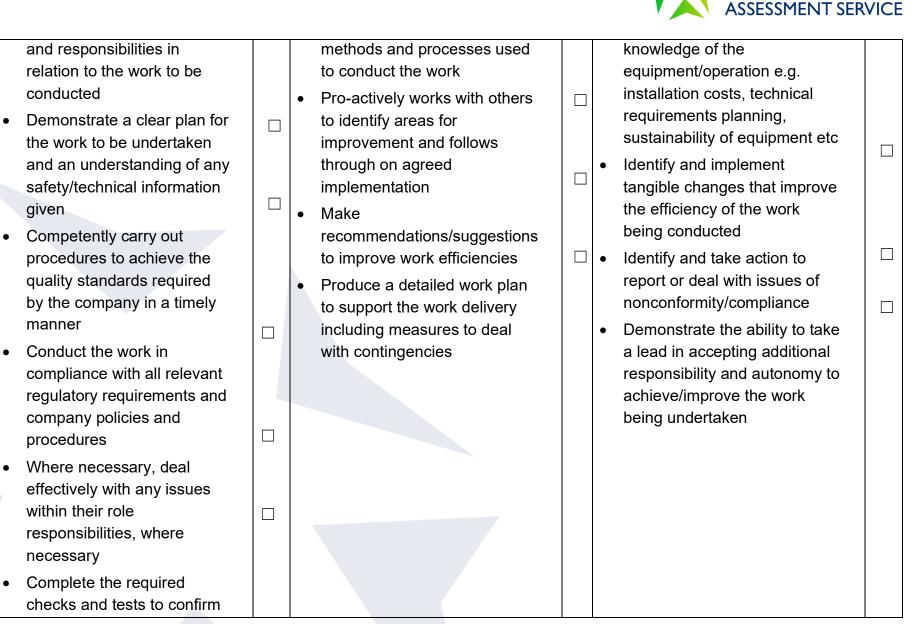
B7 Risk awareness				
Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met		m two to
 Demonstrates high concentration, the desire to reduce risks, ability to be compliant and awareness of change, through regular monitoring and checking of information 				
Assessor must ask the following standardised questions.	Assessor must record all additional que for clarification and the responses pro apprentice including examples.		Recording timeline.	Mark awarded.
Questions Develop some open ended questions				

Pathway: Plant Operations Role Specialist Skills

PO1 Carry out planned operating procedures on plant and equipment						
Pass Criteria – All to be met Merit Criteria – Minimum two to be met Distinction Criteria – Minimum two to be met			to			
Demonstrate a clear understanding of their role		Demonstrate a detailed technical knowledge of the		Demonstrate deeper technical/commercial		



EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Docuents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills





ENERGY & UTILITIES INDEPENDENT



the work meets the accuracy, finish and quality standards required			
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.	Mark awarded.
Questions Develop some open ended questions			





	Merit Criteria – Minimum two to be met		Distinction Criteria – Minimum two to be met		
Demonstrate a clear understanding of their role and responsibilities in relation to the work to be conducted Identify and give explanations of the main monitoring points of the process	 Demonstrate a detailed understanding of the process and principles of preventative maintenance Pro-actively works with others to identify areas for improvement and follows through on agreed implementation 		 Demonstrate deeper technical/commercial knowledge of the maintenance operation being undertaken e.g. installation costs, technical requirements, planning, corrective/preventative Identify and implement 		
Demonstrate a clear plan for the work to be undertaken and an understanding of any safety / technical information given Competently monitor the performance of the plant/ equipment to achieve the quality standards required by the company in a timely manner Where necessary, take	 Make recommendations/ suggestions to improve work efficiencies Produce a detailed work plan to support the maintenance operation including measures to deal with contingencies 		 tangible changes that improve the efficiency of the work being conducted Identify and take action to report or deal with issues of non-conformity/compliance Demonstrate the ability to take a lead in accepting additional responsibility and autonomy to achieve/improve the work being undertaken 	[



deviations from normal					
operations in a timely and					
effective manner					
Complete the required					
checks and tests to confirm					
the work meets the					
accuracy, finish and quality					
standards required					
Assessor must ask the following		Assessor must record all additional questions asked	Recording	Mark	
standardised questions.		for clarification and the responses provided by the	timeline.	awarde	ed.
		apprentice including examples.			
Questions					
Develop some open ended question	าร				

Pass Criteria – All to be met		Merit Criteria – Minimum two to be met		Distinction Criteria – Minimum two to be met		
 Demonstrate a clear understanding of their role and responsibilities in relation to the handover procedure 		Demonstrate a detailed understanding of the technical principles of the handover process		 Demonstrate deeper technical / commercial analysis of the handover process e.g. efficiencies, cost savings, process improvement 		





- Confirm the level of detail to be handed over
- Demonstrate a clear understanding of the point at which the handover must be facilitated
- Competently take responsibility for conducting the handover process in a controlled and timely manner
- Keep all relevant parties informed with information that concerns them
- Conduct the work in compliance with all relevant regulatory requirements and company policies
- Complete the required records of the handover process to meet the quality standards required by the company

 Demonstrate a detailed understanding of the potential limits/restrictions of the handover process

 \square

- Pro-actively works with others to identify areas for improvement in the handover process
- Makes formal proposals to improve the handover process
- Produce a detailed work plan to support the handover process including measures to deal with contingencies

 Identify and implement tangible changes that improve the efficiency of the handover process

- Identify and take action to report or deal with issues of non-conformity/compliance which affect the handover
- Demonstrate the ability to take a lead in accepting additional responsibility and autonomy to support the handover process





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.	Mark awarded.
Questions			
Develop some open ended questions			





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.

There are a maximum of **100 marks** for the interview.

To achieve a Pass for the technical interview, a Pass is required in ALL relevant elements, including all skills from the specialist pathway.

To achieve a Merit or Distinction for the technical interview, all Pass criteria must be achieved PLUS a minimum number of merit and distinction marks as described in Section 3 in the Specification 'Grading and Grading Criteria – Component 3: Technical Interview.'

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



K1 First principles relating to the operation and maintenance of appropriate plant and equipment						
Pass Criteria – All to be met		Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met			
• A working knowledge of the principles of operation for the range of plant/equipment they are responsible for		• A detailed understanding by explaining additional technical detail of the operating principles of the plant/equipment they are		• An excellent knowledge and thorough understanding of the relevant engineering principles relative to the operation and		
• The primary purpose of the range of plant/equipment worked on e.g. what the plant /		responsible for e.g. operating limits, tolerances, restrictions, effects on system		maintenance of plant and equipment encountered in their job role		
 equipment worked on does How the plant/equipment interacts within the overall system The typical characteristics of healthy and unhealthy operation for the range of plant/equipment worked on and how to identify the difference How they have used their knowledge of plant and equipment operating/maintenance 		 A detailed understanding by explaining additional technical detail of the function / interaction of the plant/equipment within the overall system e.g. synchronisation, effects on system How they have used their knowledge of plant and equipment operating/maintenance principles to improve or enhance operational activities 		 Evidence of conducting supporting technical analysis to gain a greater understanding of (a or b) a) the operating principles of plant/equipment worked on b) the function/effect of the plant/ equipment within the overall system Conducting technical research into the effects of new technologies on current/future maintenance requirements/methodologies 		





principles to support their work decisions/activities			
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.	Mark awarded.
Questions Develop some open ended questions			

Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met
 A working knowledge of the relevant health, safety and environmental regulations and standards and how they impact the overall operation A clear understanding of their 	 A detailed understanding of the relevant health, safety and environmental regulations and standards by explaining additional technical detail e.g. how they influence how the work is planned 	• Excellent and thorough health, safety and environmental knowledge and understanding in relation to the wider impact of relevant industry working practices and regulations for their
responsibilities and those of others under the relevant company policies and procedures which apply to the range of work undertaken and describe why they are	 and/or conducted Conducting reviews of work health, safety and environmental arrangements and their applicability and adapting them for changing circumstances whilst still 	 work activities How they have taken a leading role in identifying health, safety and environmental deficiencies and then implementing the appropriate solution/s in line with
required 🛛	maintaining safety	



 A knowledge of the company process/s and/or procedures for achieving and maintaining safety when working on systems within their work role and how they impact the work e.g. safe systems of work, documentation A clear understanding of the purpose of conducting risk assessments and the factors which affect the critical reasoning when making risk assessment decisions A knowledge of the Company procedure/s for reporting safety concerns and emergencies 		 How they have readily accepted additional health, safety and environmental responsibility/autonomy to maintain/improve work safety standards 		 Company polic How they have behaviour/prac appropriate tec 	challenged u		
Assessor must ask the following standardised questions.		Assessor must record all additional clarification and the response provi apprentice including examples.	-		Recording timeline.	Mark awaro	ded.
Questions Develop some open ended question	ıs						





Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	Distinction Criteria - Minimum two to b met
A working knowledge of the maintenance requirements for the range of plant/ equipment worked on within their job role A working knowledge of the company's operational processes and procedures and how these have affected/influenced their maintenance work Their planning process for conducting maintenance operations and the factors which have influenced their critical reasoning/decision making when planning their work A working knowledge of the	 A detailed knowledge of the company maintenance practices by explaining additional technical detail for maintenance procedures on plant/equipment A detailed knowledge of the company operational processes and procedures which affect maintenance operations by explaining 	 Met An excellent and thorough knowledge and understanding of relevant maintenance and operational practices/procedures for their job role An ability to analyse and provide valid justification for the company's maintenance procedures and/or operational practices for maintenance work on plant and equipment A detailed technical/commercial understanding of the effects of conducting maintenance procedures on Company plant/equipment e.g. cost, reliability, availability, sustainability
range and type of test procedures which they have used to confirm their work has met with company operational		
requirements and standards		



Develop some open ended questions			
Develop come anon anded evertiene			
Questions			
Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the response provided by the apprentice including examples.	Recording timeline.	Mark awarded.
A knowledge of how their maintenance activities have impacted plant/equipment/others			

Pass Criteria – All to be met	Merit Criteria – Minimum two to be Distinction Criteria – Minimum met	n two to
A working knowledge of the range of relevant operational theories and principles which underpin their work A working knowledge of the	 A detailed knowledge of the relevant operational theories and principles which have supported and/or influenced their work activities An excellent and thorough knowledge and understandi the relevant operational the and principles relative to pla and equipment in their job relevant. 	ories nt
basic effect/influence of the relevant operational theories and principles which directly underpin their work activities	 How they have used relevant operational theories and principles to support / influence their work decisions/activities How they have used their understanding of relevant operational theories and principles to make suggestion 	ons
The benefits of being able to identify and apply the differing	• Their inclusion of operational formulae/theories/principles to	l to



Questions Develop some open ended questions						
Assessor must ask the following standardised questions.	Assessor must record all addition for clarification and the response apprentice including examples.	-		Recording timeline.	Marl awa	¢ rded.
 operational theories and principles in relation to their job role e.g. maintenance inspections, fault finding A working knowledge of how to apply the relevant operational formulae which can be used to support their work activities 	support their technical explanations in relation to their work activities		 How they have technical resea on relevant op and principles effects of curre technologies 	arch which is l erational theo to support the	based ries	





S5 Locate, and rectify faults on plant and equipment				
Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met		
 A working knowledge of the company policies and procedures for the location of faults on plant and equipment worked on A clear understanding of the company policies and procedures in relation to achieving the safe isolation of equipment from relevant sources of energy and maintaining safety from the system How they have used tools/ equipment/techniques to inspect and identify faults on plant/equipment and develop sound solutions while recognising and defining problems How they have used tools/ cols/equipment/techniques to inspect and identify faults on plant/equipment and develop sound solutions while recognising and defining problems 	 A detailed knowledge of the company processes and procedures by explaining additional technical detail for the fault location methods/procedures conducted on plant/ equipment/systems A detailed understanding of the tools and equipment that can be used to identify and locate faults on plant/equipment/systems Their ability to take a lead in fault finding/rectification activities and accept additional responsibility/autonomy for the fault work undertaken 	 An excellent knowledge/understanding in relation to fault location/rectification procedures within their job role How they have used a range of methods to locate, and rectify faults on plant and equipment, with a detailed explanation/justification of their chosen methods How they have used their knowledge of fault location/rectification to improve/influence work outcomes 		





the rectification to the quality standards required by company policies/procedures					
 How they have recorded / reported the results of fault- finding activities in line with Company procedures 					
Assessor must ask the following standardised questions.]	Assessor must record all additional questions asked for clarification and the response provided by the apprentice including examples.	Recording timeline.	Mark awarde	ed.
Questions					
Develop some open ended question	ons				

Pass Criteria – All to be met	Merit Criteria – Minimum two to be	;	Distinction Criteria – Minimum two to
	met		be met
• A working knowledge of the range of information which can be gained from company policies and procedures which affect their work	• How they have taken a lead in interpreting/relaying technical information to progress work or support others understanding		





•	A working knowledge of the range and type of technical information/specifications available and how they are used to support work activities How they have used company work information and technical specifications to conduct/support their work activities	•	How they have questioned/clarified information which was unclear or incorrect How they have reported/updated information which was not technically correct/accurate	
•	Describe how they have used Company information to record/report the results of work carried out in line with company procedures			

Pass Criteria – All to be met		M	erit Criteria – Minimum two to b	е	Distinction Criteria – Minimum two to		
		m	et		be met		
• How they have planned inspection and maintenance operations and the factors which influenced their critical		•	Their ability to explain in detail the range of skills, knowledge and behaviours they have used to support their conducted		 An excellent knowledge/understanding in relation to inspection/maintenance procedures within their job role 		





Their ability to explain/justify the

reasoning/decisions during their planning process

- How they have implemented/complied with company operational processes and procedures during their conducted inspection and maintenance work
- How they have used tools/techniques/equipment to conduct maintenance inspection and maintenance procedures on a range of plant/equipment to meet company standards
- How they have used test equipment/procedures on plant/equipment to confirm that the work completed met with Company operational requirements
- How they have reported/recorded the outcome of their inspection and maintenance operations

operations Company inspection and \square maintenance procedures used for How they have pro-actively • a range of plant and equipment worked with others to resolve problems during How they have taken a lead in • inspection/maintenance accepting additional operations which supported responsibility/autonomy to work progression/performance improve the outcome of inspection/maintenance How they have taken action to • operations report or deal with issues of nonconformity or noncompliance during inspection/maintenance work operations

inspection/maintenance

 \square

ENERGY & EUIAS Level 3 End-point A UTILITY SKILLS (Plant Operations) Support

EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Docuents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills



Assessor must ask the following standardised questions.	Assessor must record all additional questions asked for clarification and the response provided by the apprentice including examples.	Recording timeline.	Mark awarded.
Questions Develop some open ended questions			

				has been completed to specification	
Pass Criteria – All to be met	Merit Criteria – Minimum two to k met	be	Distinction Criteria – Minimum two to be met		
• A working knowledge of their role and responsibilities in the handover of the system/equipment/plant back to operational service		How they have taken a pro- active lead in the handover process by effectively communicating the detail of handover arrangements with		How they have consulted/involved team members/other relevant persons to achieve greater understanding and improved performance	
• A working knowledge of the Company process for the handover of plant/equipment which has been worked on		 stakeholders Their ability to develop positive professional relationships with individuals to support the 		• Their ability to actively address conflict/ resolve problems with positive outcomes to build positive relationships and	
• How they have completed the required checks/tests to confirm the plant/equipment/system worked on meets operational requirements before		 handover process and resolve any issues within their role responsibility How they have adapted their communication method/style to better suit the changing 		• Their ability to effectively communicate technical information across a wide range of stakeholders e.g. colleagues, management, briefings/meetings, external clients	





Assessor must ask the following standardised questions. Questions Develop some open ended question	Assessor must record all addition for clarification and the respons apprentice including examples.	•	Recording timeline.	Mark awar	
How they have completed the company process for reporting/ recording the handover of plant/equipment back into service in line with company procedures					
 How they have confirmed the recipient/s of the handover process fully understand any critical information given 					
• How they have completed the handover of plant/equipment in line with relevant company policies and procedures					
conducting the handover process	circumstances/needs of the work				





Pathway: Plant Operations Role Specialist Skills

Pass Criteria – All to be met	Merit Criteria – Minimum two to be met	Distinction Criteria – Minimum two to be met		
 A working knowledge of their responsibilities for the range of work activities within their job role in line with company policies and procedures A working knowledge of where to obtain technical information in relation to the planned activities How they have used tools and equipment to conduct a range of operational activities in compliance with all company HSE requirements How they completed the required procedures to confirm the operational conditions meet company requirements How they have used critical reasoning to identify and 	 A detailed understanding of the range and technical requirements of the plant and equipment worked on A detailed technical understanding for the factors which can affect their critical reasoning when making decisions to resolve technical problems How they have taken a pro- active lead in organising/controlling their conducted work activities which has led to a successful completion 	An excellent knowledge and		



EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Docuents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills



	within their control effectively during their range of work					
	activities					
•	How they reported/recorded					
	the work conducted and					
	returned the work area to a safe condition in line with					
	company procedures					
•	account must ask the following		Accessor must record all additional quastions asked	Pagarding	Mark	
	ssessor must ask the following andardised questions.		Assessor must record all additional questions asked for clarification and the response provided by the	Recording timeline.	awar	
			for charmed ton and the response provided by the	time inter	amai	aca.
51	•		apprentice including examples.			
	uestions		apprentice including examples.			
Q		ns	apprentice including examples.			

Pass Criteria – All to be met	Merit Criteria – Minimum two to b met	Distinction Criteria – Minimum two to be met		
 A working knowledge of their responsibilities and for the range of monitoring activities 		 A detailed knowledge of the level of monitoring to be applied to specific plant and equipment 		 An excellent knowledge of the level of monitoring to be applied to specific plant and equipment
within their job roleA working knowledge of where to obtain technical information		How they made recommendations of improvements to the ways in		 How they have identified and recommended operational changes that have subsequently been implemented





 relating to operating specifications How they prioritise monitoring the performance of plant/equipment to ensure operating conditions are within specification How will they ensure that regulatory requirements and company policies are achieved and maintained How they responded to non- compliances in operational conditions How they maintained clear and legible records of operational 		 which process plant and equipment is monitored How they have identified and responded to operational changes thus preventing potential process shutdowns 		How their mon prevented a sh equipment	-		
conditions in line with company procedures Assessor must ask the following standardised questions.		Assessor must record all additio for clarification and the response	-		Recording timeline.	Mark awarde	d.
Questions Develop some open ended question	s	apprentice including examples.					





PO3 Handover and accept responsibility for plant and equipment AND												
PO4 Respond to contingencies												
Pass Criteria – All to be met		Merit Criteria – Minimum two to b met	e	Distinction Criteria – Minimum two to be met								
 A working knowledge of their role and responsibilities and those of others in relation to the handover procedure How they facilitate the handover taking into account the relevant safety/technical requirements How they kept other relevant parties informed with information that concerns them How they have conducted the required checks / test procedures to confirm the plant / equipment worked on can be returned to operational service How they record and receive information at the point of handover 		 A detailed understanding of the technical principles of the handover process How they pro-actively worked with others to identify areas for improvement in the handover process repaired How they produced a detailed work plan to support the handover process including measures to deal with contingencies A detailed understanding of their role and responsibilities in relation in responding to abnormal operational parameters and safety specifications How they followed emergency response procedures when 		 An excellent technical/commercial analysis of the handover process e.g. efficiencies, cost savings, process improvement How they identified and implemented tangible changes that improved the efficiency of the handover process How recommendations they identified to operational procedures were implemented 								





	apprentice including examples.				
	•	·····			
Assessor must ask the following standardised questions.		questions asked wided by the	Recording timeline.	Mark award	led.
	compromised				
-		compromised	compromised	compromised	compromised





Appendix G: Portfolio Mapping Document

Introduction

Throughout the on-programme part of the apprenticeship, the apprentice will need to compile a portfolio of evidence to support the requirements of the technical interview which is based on the portfolio. The evidence within the portfolio will need to be mapped by the apprentice to the KSB requirements using the portfolio mapping document below.

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

The portfolio 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 the EUIAS to locate the section or specific piece of evidence being discussed and referred to during the interview.
- 4. Place the portfolio mapping document at the front of the portfolio of evidence.

The apprentice's training provider must make arrangements for EUIAS to have access to the apprentice's portfolio 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.



Portfolio Mapping Document

This document must be placed at the front of the Portfolio and submitted to EUIAS with the Portfolio.

Mapping Sign off on Completion:

ļ	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	Apprenticeship Standard Criteria	PORTFOLIO REVIEW (Apprentice Input)			
			1	2	3	
	K1	First principles relating to operation and maintenance of plant and equipment				
	K2	Relevant industry health and safety standards, regulations and environmental and regulatory requirements				
	K3	Maintenance and operational practices, processes and procedures				
	K4	Relevant engineering theories and principles				
	Asse	ssor Comments:				



Core Skills

Ref.	Apprenticeship Standard Criteria	PORTFOLIO REVIEW (Apprentice Input)			
		1	2	3	
S5	Locate, and rectify faults on plant and equipment				
S6	Read, understand, interpret and work to technical information				
S7	Inspect and maintain plant and equipment				
S8	Communicate, handover and confirm that the appropriate engineering process has been completed				
Assessor Comments:					

EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Documents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills



Core Behaviours

Ref.	Apprenticeship Standard Criteria	PORTFOLIO REVIEW (Apprentice Input)			
		1	2	3	
B5	Critical reasoning				
Assessor Comments:					

EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Documents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills



Pathway: Plant Operations Specific Skills

Ref.	Apprenticeship Standard Criteria	PORTFOLIO REVIEW (Apprentice Input)				
		1	2	3		
PO1	Carry out planned operating procedures on plant and equipment					
PO2	Monitor the performance of the plant and equipment					
PO3	Handover and accept responsibility for plant and equipment					
PO4	Respond to contingencies					
Assessor Comments:						

EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Documents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills



© Energy & Utility Skills

All rights reserved. No part of this publication may be reproduced, stored in a retrievable system, or transmitted in any form or by any means whatsoever without prior written permission from the copyright holder. <u>www.euskills.co.uk</u>

EUIAS Level 3 End-point Assessment for Maintenance and Operations Engineering Technician (Plant Operations) Supporting Documents QAN: 603/7266/7 – ST0154/AP02 v3.0 © 2023 Energy & Utility Skills