L3 EPA Electrical Power Protection and Plant Commissioning Engineer

EPA Specification Section 5.2 – The Technical Interview

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Contacts

This specification has been designed to provide all the advice and guidance you need to prepare yourself and your apprentices for end-point assessment. However, if you have any further questions please contact the EUIAS Help Desk using one of the following:

Help Desk email: enquiries@euias.co.uk

Help Desk telephone: 0121 713 8310

Introduction

During the Technical Interview process each apprentice will be interviewed on the content of their work log which will contain evidence from the more complex work activities which they have undertaken during their on-programme work period. The work log is compiled throughout the apprenticeship and finalised during the end-point period. The work log should contain written accounts of activities that have been completed and referenced against the relevant skills, knowledge and behaviours of their job role as identified in Table 2 below. The work log should be supported by relevant evidence, such as photographs, work instructions, safety documentation, project plans and reports. Progress review documentation should also be included.

The interview discussion will cover the relevant knowledge, skills and supporting behaviours through the use of the standardised questions provided for each of the relevant elements which support the scenario being discussed. Where necessary, additional questioning may be conducted by the technical expert to probe further into the detail of the topic area and activities being discussed. Wherever possible the interviewers questioning will be contextualised to the apprentice's job role and the specific work activities they are presenting from their work log.

Assessment Requirements

The interview will be conducted by a technical expert accompanied by an independent assessor. The technical expert and independent assessor will be appointed by EUIAS. It must be conducted in a quiet and private environment where any distractions to the interview can be minimised. The technical interview will typically last 2 hours, but no more than 3 hours. The interview will cover the knowledge, skills and behaviours in relation to the following four specific skill topic areas:

1. Undertakes testing, commissioning and maintenance activities on electrical power systems and equipment. This could include transformers, switchgear, conductors, battery systems and ancillary equipment
2. Undertakes functionality testing and the injection of currents and voltages into high voltage equipment and their associated protection and control systems to simulate the range of fault conditions and scenarios that can occur on the electrical system
3. Uses appropriate test equipment to verify protection and control settings and ensure correct installation and operation of modern microprocessor and numerical based protection which may include older electromechanical relays
4. Ensures that protection systems interface correctly with the associated high voltage equipment and, where necessary, coordinates effectively with the wider high voltage system.

Using each topic area as the basis for the interview, the apprentice should present evidence to demonstrate how they have developed their skills, knowledge and behaviours for each scenario being discussed. The criteria are listed below in Table 2. The interviewer will record the apprentice's achievement against the requirements of the criteria across the four topic areas.

It is important that the apprentice is completely familiar with the criteria in Table 2. Refer to Section 4 for amplification and guidance.

Table 2

KSB	Available points	
	Pass	Distinction*
Core Technical Knowledge	**70 points awarded if all Pass criteria are achieved**	
TK1 a comprehensive understanding of UK electrical power systems		**2**
TK2 The application and operation of system plant & equipment		**2**
TK3 Fault analysis methods and how to interpret results		**2**
TK4 How high voltage power generation, transmission and distribution plant & equipment operates		**2**
TK5 Protection, control and telemetry equipment and the impact on the electrical network of its operation		**2**
TK6 Commissioning and testing procedures & processes on high voltage apparatus		**2**
TK7 Failure mode(s) of plant and equipment, their impact on the electrical network and the required remedial actions		**2**
TK8 High voltage electrical network operations and topologies		**2**
TK9 High voltage safe systems of work and risk management		**2**
TK10 The application of the UK power standards, regulations and policies		**2**
TK11 The type and application of test equipment used for commissioning purposes		**2**
Core Skills		
S1 Applies appropriate engineering and analytical processes to both normal and abnormal conditions on high voltage power generation, transmission or distribution plant & equipment		**1**
S2 Demonstrate application of safe working practices in line with company processes and legislative requirements		**1**
S3 Use of a wide range of test equipment to confirm the suitability of the high voltage plant for conformity and operational service		**1**
S5 Prepares and checks technical reports		**1**
PL1 Undertake testing, commissioning and maintenance activities on electrical power systems and equipment. This could include transformers, switchgear, conductors, battery systems and ancillary equipment		**1**
PR1 Undertake protection, testing, commissioning and maintenance activities involving functionality testing and the injection of currents and voltages into high voltage equipment and their associated protection and control systems to simulate the range of fault conditions and scenarios that can occur on the electrical system		**1**

KSB	Available points	
	Pass	Distinction*
PR2 Use appropriate test equipment to verify protection and control settings and ensure correct installation and operation of modern microprocessor and numerical based protection as well as older electromechanical relays		**1**
PR3 Ensure that protection systems interface correctly with the associated high voltage equipment and, where necessary, coordinates effectively with the wider high voltage system		**1**
B4 Problem solving: pro-actively identifies and solves problems, within personal area of expertise, by using a logical and systematic approach		**1**
B5 Methodical: identifies and applies procedures and processes as appropriate to the situation		**1**

*The maximum Distinction marks indicated are awarded for achievement of a skill. If the skill is not achieved at Distinction level, 0 marks are awarded for the Distinction criterion.

In advance of the interview the apprentice will receive information about how the interview will work and some guidance for the work log. The apprentice should use the guidance to help detail examples of evidence of application of skills, knowledge and behaviours typically drawn from work activities.

The interview will be subject to moderation by EUIAS.

Grading the Technical Interview

The apprentice can achieve a Pass, Distinction or Fail.

There will be a maximum of 100 marks available for the Technical Interview.

A Pass grade will be recommended in cases where the apprentice demonstrates competence for all the criteria listed in Table 2.

The addition of Distinction points can only be recommended against elements where a Pass has already been achieved. A Distinction grading will be recommended in cases where the minimum Distinction mark of 85 is reached.

Marks will be awarded using the scores indicated in Table 2 above.

Overall scores and grades are awarded as follows:

Fail	Pass	Distinction
0-69 marks	**70-84 marks**	**85-100 marks**

Indicative Grading Criteria

The following criteria are indicative of the criteria the assessor will be looking for when the apprentice takes part in the Technical Interview.

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
TK1 A comprehensive understanding of electrical power systems	*All the pass criteria must be achieved by providing evidence which demonstrates:* A comprehensive knowledge of the relevant Company's electrical power system, network relevant to their work projects and job role How they have applied their knowledge when planning their protection and commissioning projects ensuring compliance with Company policies How they have applied their knowledge to influence, support their decisions during their protection and commissioning projects How they have used their knowledge to make contingency plans for their protection and commissioning projects	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A comprehensive knowledge and **detailed understanding** of the Company's electrical power network relevant to their work projects and job role and **how it influences protection designs** How they have applied their knowledge to make protection, commissioning **proposals which have led to improved efficiencies and operations** How they have used their knowledge to **challenge and report identified non-compliance** with the relevant Company engineering policies How they have **conducted analysis of the network design to support** their protection and commissioning operations
TK2 Detailed understanding of the application/operation of relevant plant &	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the application,	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **thorough**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
equipment	operation of the relevant plant and equipment involved in their work projects and job role How they used their knowledge of the application, operation of plant & equipment to influence the planning of their protection and commissioning projects How they have applied their knowledge to conduct operations on relevant plant and equipment during their protection and commissioning projects The process they would follow to gain further technical information, specifications about plant and equipment if required	**understanding** of the application, operation of the relevant plant and equipment involved in their work projects, job role and **its interaction with the wider network** How they have applied their knowledge of plant and equipment to make protection, commissioning **proposals which have led to improved efficiencies and operations** How they have used their knowledge of plant and equipment **to challenge and report identified non-compliance** with the relevant Company engineering policies How they have **researched the operation of plant, equipment to support** their protection and commissioning operations
TK3 Fault analysis methods in order to interpret results	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the relevant fault analysis methods used in relation to their work projects and job role How they have applied critical thinking to determine which fault analysis method/s to use during their work projects and job role They have taken ownership of their fault analysis work, and where relevant those	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **thorough technical understanding** of the relevant fault analysis methods in relation to their work projects and job role Ability to **use appropriate engineering theories and principles to justify** their fault analysis approach **to achieve successful outcomes**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	affected by the work How they have taken a systematic and logical approach to apply a range of fault analysis procedures to solve problems during their work projects and job role How they interpreted the results of their fault analysis to identify and implement solutions to resolve engineering problems	Ability to **compare and analyse the differing** fault analysis methods **to ensure the optimum method is chosen** How they have used their knowledge of fault analysis to **identify issues and influence operational changes** which have **led to an improved performance**
TK4 How high voltage power generation, transmission and distribution plant and equipment operates	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the Company's electrical network layout, configuration relevant to their work projects and job role A detailed knowledge of the Company's high voltage plant and equipment and how it operates relevant to their work projects and job role How they used their knowledge of the plant & equipment to influence the planning of their protection and commissioning projects How they have applied their knowledge to conduct operations on relevant plant and equipment during their protection and commissioning projects	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **thorough understanding** of the Company's electrical network design **and operating parameters** How they have **applied** their knowledge of plant and equipment to make protection, commissioning **proposals which have led to improved efficiencies and operations** How they have **used** their knowledge of plant and equipment **to challenge and report identified non-compliance** with the relevant Company engineering policies How they have **researched the operation** of plant and equipment to support their protection and commissioning operations

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
TK5 Understands protection, control and telemetry equipment and the impact on the electrical network of its operation	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the protection and control equipment used on the network which are relevant to their work projects and job role A detailed knowledge of the telemetry equipment used on the network which is applicable to their work projects and job role and the impact of its use on the network How they have used their knowledge to influence, support the planning of their protection and commissioning work projects How they have used their knowledge to influence their decisions when conducting their protection and commissioning work	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **thorough technical understanding** of the protection and control equipment used on the network which are relevant to their work projects and job role A detailed knowledge and **thorough technical understanding** of the telemetry equipment used on the network which is relevant to their work projects and job role How they have **used appropriate engineering theories and principle**s to make **suggestions**, **proposals** which have led to an **improved system and network performance** How they have used their knowledge **to appropriately challenge and report identified non-compliance** with the relevant Company engineering policies
TK6 Understands commissioning and testing procedures & processes	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the relevant Company commissioning and testing procedures and processes which are relevant to their work projects and job role How they have used their knowledge of the	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **thorough technical understanding** of the relevant Company commissioning procedures and processes which are relevant to their work projects and job role

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	relevant Company commissioning and testing processes, procedures to plan and conduct their work projects and job role How they have applied their knowledge to influence, support their decisions during their commissioning and testing operations How they have used their knowledge to identify and resolve problems during their commissioning and testing operations	A detailed knowledge and **thorough technical understanding** of the relevant Company testing procedures and processes which are relevant to their work projects and job role How they have **used** their knowledge of relevant commissioning and testing procedures **to make suggestions which have influenced or led to an improved performance** How they have used their knowledge to appropriately **to challenge and report identified non-compliance** with the relevant Company engineering policies
TK7 Understands failure mode(s) of plant and equipment and the impact on the electrical network and the knowledge to identify required remedial actions	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the symptoms, causes of plant and equipment failure which is relevant to their work projects and job role A detailed knowledge of the potential impact on the wider network of plant, equipment failure which is relevant to their work projects and job role How they have used their knowledge of plant and equipment failure to support their protection, commissioning decisions in their work projects and job role	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **thorough technical understanding** of the symptoms, causes of plant and equipment failure which is relevant to their work projects and job role A detailed knowledge and **thorough technical understanding** of the potential impact of plant and equipment failure which is relevant to their work projects and job role How they have **analysed** plant, equipment failure **to implement remedial action/s** in their work projects and job role

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	How they have used their knowledge of plant and equipment failure to implement remedial action/s in their work projects and job role	How they have **applied** the correct engineering theories and principles **to take remedial actions** which have **achieved successful outcomes**
TK8 Understands high voltage electrical network operations and topologies	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the relevant Company high voltage electrical network operations and procedures relevant to their work projects and job role A detailed knowledge of the roles and responsibilities of the persons involved in high voltage electrical network operations A detailed knowledge of the relevant Company high voltage topologies (network symbols and layout) used during their work projects How they have used their knowledge of high voltage electrical network operation, topologies to plan and conduct their work projects	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed **technical** knowledge of the relevant Company high voltage electrical network operations and procedures relevant to their work projects and job role How they have **applied** their knowledge of network operations **to make proposals** which have **led to improved operational efficiencies and performance** How they have **applied** their knowledge of network topologies (network layout) **to make proposals** which have **led to improved operational efficiencies and performance** How they have **conducted analysis of the network design** to identify issues and solve problems which have to **led to improved network efficiencies**
TK9 Understands high voltage safe systems of work and risk management	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the relevant Company	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **thorough**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	safe systems of work and risk management procedures relevant to their work projects and job role A detailed knowledge of the roles and responsibilities of the persons involved in implementing and maintaining safe systems of work relevant to their work projects and job role A detailed knowledge of the Company processes and procedures for identifying and managing risk relevant to their work projects and job role How they have used their knowledge of safe systems of work and risk management procedures to plan and conduct their work projects	**understanding** of the relevant Company safe systems of work and risk management procedures relevant to their work projects and job role How they have **applied their knowledge** of safe systems of work **to make proposals** which have **led to improved safety performance** How they have **applied their knowledge o**f risk management **to make proposals** which have **led to improved safety performance** They used their knowledge of safe systems of work and risk management procedures to **challenge unsafe behaviour and practices using appropriate techniques**
TK10 Understands the application of Electricity Supply Standards, regulations and policies	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the Company's regulatory obligations and how they influence their own work projects and job role A detailed knowledge of the Electricity Supply Regulations and how they have applied them when planning, conducting their work projects and job role A detailed knowledge of the Company policies	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed and **thorough knowledge** of the business's regulatory obligations and the impact they have on the Company's **strategic planning** A detailed and **thorough knowledge** of the Electricity Supply Regulations and the impact they have on the Company's **strategic planning**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	which are relevant to their work projects, job role and how they have applied them when planning and conducting their work How they have used their knowledge of the regulatory requirements when planning and conducting their work projects	How have used their knowledge **to propose, implement solutions** which have led to an **improved regulatory performance** How they have **gathered and analysed** relevant information in order to identify, implement workable solutions to support and meet regulatory requirements
TK11 Understands test equipment to select appropriate equipment for commissioning	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the relevant test equipment and procedures required for commissioning A detailed knowledge of the test results, parameters for commissioning plant, systems relevant to their work projects and job role How they have conducted testing procedures and processes relevant to their work projects and job role in a logical and methodical manner Ability to correctly interpret and record, present the test results gained in a clear and concise manner from the testing conducted	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **technical understanding** of the relevant test equipment and the test procedures required for their work projects and job role A detailed knowledge and **technical understanding** of the relevant test results and parameters and the **causes / implications of not achieving the expected results** How they have used appropriate engineering theories and principles to **analyse test results** to gain a **deeper understanding** of the equipment and system being commissioned How they have used the results gained to **identify and solve technical issues** which has led to a **successful outcome**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
S1 Applies appropriate engineering and analytical processes to both normal and abnormal conditions on high voltage power generation, transmission or distribution plant & equipment	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the relevant Company engineering and analytical processes during both normal and abnormal conditions on high voltage plant & equipment Ability to apply the relevant Company engineering operations on high voltage plant, equipment during both normal and abnormal work situations and conditions Ability to apply the relevant Company analytical processes when conducting work on high voltage plant. equipment in a logical and methodical manner How they have developed clear plans for dealing with contingencies which may occur during normal and abnormal work situations How they have used a systematic and logical approach to pro-actively solve problems during normal and or abnormal work situations and conditions	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* Ability to **take the lead and organise and control engineering operations** on high voltage plant, equipment during both normal and abnormal work situations Ability to **make suggestions for improvement** which support, enhance the outcome of the work activity Ability to **accurately and confidentially describe the rationale** for their operations and can **justify** the actions they have taken Ability to **use the appropriate engineering theories and principles** to **technically explain the operations undertaken**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
S2 Demonstrate application of safe working practices in line with company processes and legislative requirements	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the relevant Company safe working practices, process's and legislative requirements relevant to their work projects and job role Ability to plan and organise the relevant Company safe working practices, process's and legislative requirements relevant to their work project and job role Ability to take ownership of the operations and apply the relevant Company safe working practices and process's using a logical and systematic approach How they have taken personal responsibility for the safety of themselves and others under their control or affected by their operations How they have monitored and maintained a safe working environment and taken action where necessary to maintain this condition	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge and **through understanding** of the relevant Company safe working practices, process's and legislative requirements relevant to their work activity Ability to **assess the impact** of safety related problems and **seek out and solve their root cause(s)** Ability to **challenge unsafe working practices** using appropriate techniques to effectively **resolve issues and situations** Ability to make **suggestions** which **significantly improve, rectify the safety arrangements and conditions** for the work being conducted
S3 Uses a range of appropriate test equipment to confirm the suitability of the	*All the pass criteria must be achieved by providing evidence which demonstrates:*	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:*

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
high voltage plant for conformity and operational service	A detailed knowledge of the relevant Company high voltage test equipment and the procedure(s) for use, relevant to their work projects and job role Ability to use different types of test equipment to confirm the suitability of high voltage plant, equipment for conformity and suitability for operational service Ability to take ownership of the operations and apply testing procedures and processes in a planned and methodical manner Ability to correctly interpret the test results gained from their testing operations and present, record the test information gained in a clear and concise manner Ability to use test information to make informed decisions and solve problems by using a logical and systematic approach	A detailed **technical** knowledge and **understanding** of the relevant test equipment and the test procedures required for their work projects and job role Ability to **gather and analyse test information** to support their course of action and **assess the impact in different approaches**. Ability to use the **appropriate engineering theories and principles** to **technically explain** the testing operations undertaken Ability to **assess** the impact of problem situations and **pro-actively identify and solve problems**
S5 Prepares and checks technical reports	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the Company reporting methods and processes relevant to their work projects and job role Ability to produce and check technical reports in a methodical manner to record and inform the	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* **Ability to analyse and interpret complex technical information** from engineering diagrams, specifications and use it to **produce clear and accurate reports** Ability to **communicate complex technical**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	business of their work projects Ability to present technical information from their reports in a clear and effective manner to sufficient depth for the audience A clear understanding of the Company process for reporting, amending incorrect and inaccurate technical information identified during their work activities	**information** contained in their reports in a clear and understandable manner Ability to **pro-actively identify and solve problems** with engineering diagrams, drawings by **using a logical and systematic approach** Ability to **accurately capture i**n their reports their actions on plant and equipment and **justify** the actions / and approach taken
PL1 Undertake testing, commissioning and maintenance activities on electrical power systems and equipment. This could include transformers, switchgear, conductors, battery systems and ancillary equipment	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the Company's testing, commissioning and maintenance activities on electrical power systems relevant to their work projects and job role Ability to methodically conduct testing procedures in line with Company procedures on electrical power systems relevant to their work projects and job role Ability to methodically conduct commissioning procedures in line with Company procedures on electrical power systems relevant to their work projects and job role Ability to methodically conduct maintenance procedures in line with Company procedures on electrical power systems relevant to their work	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed **technical** knowledge of the Company's testing, commissioning and maintenance activities relevant to their work projects and job role which **demonstrates excellent levels of understanding** in all areas Ability to **accurately and confidently describe the impact and effect of their actions** on the plant, equipment and electricity network as a whole and can **provide justification** for their course of action during their work projects Ability to **use and describe the appropriate engineering theories and principles** underpinning their projects and can j**ustify their approach taken to achieve successful outcomes**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	projects and job role Ability to take ownership of their work and the work of others to achieve successful outcomes Ability to methodically solve problems by using a logical and systematic approach Ability to communicate effectively and provide internal and or external stakeholders with relevant information when required	Ability to **proactively take the lead** and **methodically resolve the root cause of problems** by using a logical and systematic approach
PR1 Undertakes functionality testing and the injection of currents and voltages into high voltage equipment and their associated protection and control systems to simulate the range of fault conditions and scenarios that can occur on the electrical system	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the Company's injection testing procedures on electrical power systems relevant to their work projects and job role Ability to methodically conduct injection testing procedures in line with Company procedures on electrical power systems relevant to their work projects and job role Ability to follow Company procedures to systematically interpret the test results gained Ability to use the results gained to make informed decisions on the actions to take Ability to take ownership of their work and the	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed **technical** knowledge of the Company's injection testing procedures relevant to their work projects and job role which demonstrates **excellent levels of understanding** Ability to **accurately and confidently describe the impact / effect of their actions** on the equipment / network being tested and can provide **justification** for their course of action during their work projects Ability to **use and describe** the appropriate engineering theories and principles underpinning their activities and can **justify their approach** taken to achieve successful

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	work of others to achieve successful outcomes Ability to methodically solve problems by using a logical and systematic approach Ability to communicate effectively and provide internal and or external stakeholders with relevant information when required	outcomes Ability to **proactively take the lead** and **methodically resolve the root cause of problems** by using a logical and systematic approach
PR2 Uses appropriate test equipment to verify protection and control settings and ensure correct installation and operation of modern microprocessor and numerical based protection which may include electromechanical relays	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the Company's protection and control settings on equipment, electrical networks relevant to their work projects and job role Ability to methodically test and verify protection and control settings on equipment, electrical networks relevant to their work projects and job role Ability to methodically ensure correct installation and operation of microprocessor and numerical based protection on equipment, electrical networks relevant to their work projects and job role Ability to correctly interpret and use the results gained to make informed decisions on the actions to take	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed **technical** knowledge of the Company's injection testing procedures relevant to their work projects and job role which demonstrates **excellent levels of understanding** Ability to **accurately and confidently describe the impact / effect of their actions** on the equipment, network being tested and can **provide justification** for their course of action during their work projects Ability to use and describe the **appropriate engineering theories and principles** underpinning their activities and can **justify their approach** taken to achieve **successful outcomes** Ability to **proactively take the lead and methodically resolve the root cause** of

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	Ability to take ownership of their work and the work of others to achieve successful outcomes Ability to methodically solve problems by using a logical and systematic approach Ability to communicate effectively and provide internal and or external stakeholders with relevant information when required	problems by using a logical and systematic approach
PR3 Ensure that protection systems interface correctly with the associated high voltage equipment and, where necessary, coordinates effectively with the wider high voltage system	*All the pass criteria must be achieved by providing evidence which demonstrates:* A detailed knowledge of the Company's protection systems and how they interface with the associated high voltage equipment relevant to their work projects and job role Ability to methodically interface operations on high voltage equipment, electrical systems relevant to their work projects and job role Ability to methodically check and confirm correct interface on high voltage equipment, electrical systems relevant to their work projects and job role Ability to correctly interpret and use the results gained to make informed decisions on the actions to take Ability to take ownership of their work and the	*A minimum of 2 criteria must be achieved by providing evidence which demonstrates:* A detailed **technical** knowledge of the Company's protection systems and interfaces with the associated high voltage equipment relevant to their work projects and job role which demonstrates excellent levels of understanding Ability to **accurately and confidently describe the impact, effect of their actions** on the equipment, system being worked on and can provide **justification for their course of action** during their work projects Ability to use and describe the **appropriate engineering theories and principles** underpinning their activities and can **justify their approach** taken to achieve successful outcomes Ability to **proactively take the lead and**

Standard	Indicative Pass Criteria	Indicative Distinction Criteria
	work of others to achieve successful outcomes Ability to methodically solve problems by using a logical and systematic approach Ability to communicate effectively and provide internal and or external stakeholders with relevant information when required	**methodically resolve the root cause of problems** by using a logical and systematic approach