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## Compliance Statement

The Quality System described in this plan is binding for all the Project Management Team that will execute the **PLC Refurbishment**, Northern Grid.

The Project Management Team shall ensure that all the personnel under their responsibility have understood the objectives and lines of action for the Quality System. They must also ensure that these subordinates apply the procedures that are related to their positions, to ensure that all quality, corrective action, prevention, health, safety, and environmental policies are complied with.

The quality resource thereby ensures compliance and, when appropriate, proposes any necessary actions to the Management Team, to ensure that all the Quality System operations are permanent in keeping with the established objectives.

### 1. Introduction

The Quality Management Systems focuses mainly on how the Management team plans and executes their quality initiatives. This document does not form part of the works information in the request for tender and contract documentation but provides confidence that an agreeable level of quality, of the works and service, will be achieved.

### 2. Scope

#### 2.1 Applicability

This document applies to the whole **PLC Refurbishment, Northern Grid** management team and covers planning, management, monitoring and reporting of quality related tasks, responsibilities, applicable processes, resourcing, and requirements for all phases in the projects/processes. This also document also applies to all **PLC Refurbishment, Northern Grid** employees, stakeholders and interested parties (GBE, procurement, finance, manufacturing, quality, safety, installation, and commission works).

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## 2.2 Detailed Scope/High Level Scope

### 400kV Yard

Quantity	Bay	Scope of Work
4	Leseding Substation – (Witkop and Merensky Feeders)	Replace LME's
2	Matimba Substation- (Marang) Refer to North West Grid Design Report NW_PLC_Ph1-P-D87	Replace LME's

### 275kV Yard

Quantity	Bay	Scope of Work
6	Acornhoek Substation – (Marathon 1, 2 and PLC Refurbishment 3 Feeders)	Replace LME's
4	Merensky Substation – (Senakangwedi 1 and PLC Refurbishment 1 Feeders)	Replace LME's
4	Warmbad Substation - (Pelly 1 and Witkop 1 Feeders)	Replace LME's
2	Witkop Substation – (Spencer 1 Feeder)	Replace LME's
2	Senakangwedi Substation – (Simplon 1 Feeder)	Replace LME's

### Remotes Ends 400kV Yard

Quantity	Bay	Scope of Work
2	Witkop Substation – Leseding 1 Feeder	Replace LME's
2	Merensky Substation – Leseding 1 Feeder	Replace LME's
2	Marang Substation – Matimba Substation	Replace LME's

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**Remotes Ends 275 kV Yard**

<b>Quantity</b>	<b>Bay</b>	<b>Scope of Work</b>
<b>4</b>	Marathon Substation – (Acornhoek 1 & 2 Feeders)	Replace LME’s
<b>4</b>	PLC Refurbishment Substattion – (Acornhoek 1 and Merensky 1 Feeders)	Replace LME’s
<b>2</b>	Senakangwedi Substation – (Merensky 1 Feeder)	Replace LME’s
<b>2</b>	Pelly Substation - (Warmbad 1 Feeders)	Replace LME’s
<b>2</b>	Simplon Substation – (Senakangwedi 1 Feeder)	Replace LME’s
<b>4</b>	Witkop Substation – (Warmbad 1 and Spencer Feeders)	Replace LME’s

**2.2.1 Project Target date**

Start: 01 November 2024

End: 30 June 2027

**2.3 Normative/Informative References**

**2.3.1 Normative**

- [1] 240-105658000 Supplier Quality Management Specification (QM58)
- [2] 240-180000564 Raising, Capturing, Monitoring, Trending and Closeout of External non-Conformity Work Instruction
- [3] 240-44175038 Control and Non-conforming Outputs Procedure

**2.3.2 Informative**

- [4] ISO 9000:2015 Quality Management Systems – Fundamentals and Vocabulary
- [5] ISO 9001:2015 Quality Management Systems Requirements
- [6] ISO 10005:2018 Guidelines for Quality Plans Standards
- [7] ISO 10006:2018 Guidelines for Quality Management Systems in Projects

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[8] ISO 14001:2015 Environmental Management Systems

[9] ISO 45001:2018 Occupational Health and Safety Management System

[10] 240-69119603: Start up Projects.

## 2.4 Quality Objectives

The purpose of this document is to describe the project quality management system (including quality planning, assurance, and control) established at the **PLC Refurbishment** site, to ensure that all quality planning, assurance and control programmes, policies and procedures are complied with.

The project manager in conjunction with the appointed project quality resource shall ensure that the quality system is utilised to determine customer needs (both stated and implied) to enhance customer satisfaction. The activities of the **PLC Refurbishment** contractors, suppliers and sub-contractors shall conform to the contractor's project approved quality management systems, and to the **PLC Refurbishment** quality management system, to ensure compliance with the contract requirements. Other relevant project procedures shall be prepared before the commencement of the construction activities, and to be approved by the project before implementation.

The responsibility for preparation, implementation, revision, review and approval of this plan, policies, procedures, and quality plans are outlined in the quality management system.

## 2.5 Roles and Responsibilities

### 2.5.1 Quality Assurance

The appointed quality assurance resource will be responsible for ensuring that quality activities as outlined in this document are implemented appropriately and complied with,

- Conducting internal audits to ensure continuous improvement.
- Report on any non-compliance to the requirements of this document to the Project Manager,
- Promote quality through forums, awareness sessions and training etc.
- Communicate the requirements of this document to the project management team and the contractors.

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### 2.5.2 Project Manager shall be responsible for:

- Enforcing procedures, work instructions and forms in support of defined processes,
- Clarifying standard of acceptability for all requirements, including those which contain
- subjective judgement and thresholds,
- Identification of suitable inspection, testing and other verification activities,
- Identifying minimum quality records that will be kept on site,
- Initiating action to prevent the occurrence of any nonconformities regarding the quality of the product, service, process, and system,
- Identifying, recording, and addressing any problems regarding the quality of the product, service, process, and system,
- Initiating, recommending, or providing solutions through designated channels,
- Verifying the implementation of solutions.

### 2.5.3 Process for Monitoring

**PLC Refurbishment** project management team shall monitor and measure the product against the product requirements. This shall be carried out at different stages of the product realization process in accordance with surveillance or planned audit.

## 3. Quality Overview

**PLC Refurbishment** approach to the management of the quality of its implementation includes a combination of quality planning, quality assurance and quality control by the project management team, contractors, suppliers, sub-contractors, and other stakeholders or interested parties who are or will be involved in the implementation of the project. The project quality plan details the systems and controls that the **PLC Refurbishment** management team (project team) has or will put in place so that the quality of the project will meet the requirements specified in the projects quality plans. The document provides definition and overall management of the quality approach to be followed by employees, contractors, suppliers, sub-contractors, and consultants. The quality of the project's implementation will be ensured through an integrated system of quality planning and assurance performed by the Project quality resource and quality control provided by both the projects and contractor's supervisors.

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Project quality resource and site supervisor is responsible for the day-to-day coordination of quality planning and assurance and quality control measures on site. Quality contractual requirements for the contractors, suppliers and sub-contractors are stipulated in the contract quality requirements standard 240-105658000 Supplier Quality Management Specification (QM58)

### 3.1 Project Processes

The project quality plan been developed in accordance with 240-105658000 Supplier Quality Management Specification (QM58) standard. The **PLC Refurbishment** will be managed through the Project Life Cycle Model (PLCM). The PLCM is a process-based approach for project management providing an easily tailored and scalable method for the management of projects. Each process is defined with its packages, key inputs, and outputs together with the specific objectives to be achieved and activities to be carried out. The Project quality plan sets out the aims of the project as a framework to guide the project management team in achieving success.

### 3.2 Document Data Control

The PLC Refurbishment management team has established a document control procedure to control documents and data to ensure that:

- a) All necessary and appropriate documents are available.
- b) All documents and changes are in writing, reviewed and approved, and promptly implemented.
- c) The dates of issue and receipt of documents and amendments are recorded.
- d) Obsolete documents are promptly removed from issue or use.
- e) Documents of external origin are identified and controlled.

Documents to be controlled will normally include: Project implementation manual (PIM)/business plan/charter, manuals, procedures, plans, processes, records of decisions, safety, health and environmental procedures and processes, financial documents, HR documents and other relevant documents, commercial procedures and processes, customer Instructions, project briefs, design statements, calculations, drawings (whether internally or

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externally produced), specifications, conditions of contract, inspection and test plans, resulting records etc.

### 3.3 Record Control

The **PLC Refurbishment** management team has established a procedure to control all project records to comply with the quality management system and contract requirements. quality records are generated in many forms, such as minutes of contract review meetings, inspection and test results, calibration certificates, product conformity certificates, confirmations of verbal instructions, resolved non-conformance reports, drawings, designs, defects, data on computer disks, communications, etc. compliance is demonstrated as described below:

- a) Quality records are prepared and maintained to demonstrate (1) that the work meets specification and (2) the effective operation of the **PLC Refurbishment** quality management system.
- b) The scope and retention of quality records shall be agreed with the customer t. quality records are made available to the customer, or its representative as specified in the contract (URS).
- c) A systematic approach is applied to the storage, protection, and retrieval of quality records.
- d) Project documents will be managed through a combination of a secure document filing and controlled storage system and a computerised document tracking system.

Guidance on how the contractor must control their documents and records is given in the 240-105658000 Supplier Quality Management Specification (QM58)

## 4. Management Responsibility

### 4.1 Customer Focus

The **PLC Refurbishment** project management team:

- recognises the importance of customer needs shall make themselves familiar with the contract requirements (URS) both stated and implied. All post-delivery requirements, as well as statutory or regulatory constraints, shall be addressed to ensure that the customer's requirements are satisfied.

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- will monitor information and data, relating to the customer's perception of the management team, to determine whether the organisation has complied with the customer requirements.

Emphasis on ensuring customer satisfaction by:

- a) Preventing non-conformities at all stages,
- b) Adhering to the project schedule,
- c) Employing efficient project techniques,
- d) Providing value for money,
- e) Ensuring the safety of all concerned and meeting applicable regulatory and statutory requirements.

## 5. Quality Policy

NTCSA has established SHEQ Policy which guides all BU's in relation to quality management system and its effective implementation. PD project management team has further established objectives that are aligned to the Transmission objectives.

## 6. Management Review

PD shall formally review quality management system once a year to ensure its continuing suitability and effectiveness to meet their requirements, and applicable statutory and regulatory requirements.

The policies and objectives are reviewed for compliance and any changes will be implemented and documented accordingly for continual improvement. Records of such reviews shall be maintained by the PD SHEQ office in the form of minutes with actions for follow-up.

## 7. Resource Management

- Site Manager/Supervisor shall be supported by a team of site representatives. Site representatives will be trained and instructed in the application of quality management and will be responsible for effective quality management and monitoring for the areas under their control.

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- The project manager shall also be supported by the quality manager in terms of entrenching quality management principles in each project. Technical and Engineering input shall be obtained from Group Technology, Engineering and Land Development. Quality assurance shall be allocated to suitably qualified and experienced personnel. These people shall inspect, audit projects for compliance to management system, specifications and client requirements.
- Specific responsibilities, authorities and accountabilities in terms of this Strategy shall be indicated in the relevant project execution plan, the applicable conditions of contract and in the pertinent sections of the contract data, appointments, agreements and the project responsibility matrix. Northern Portfolio reporting structures are indicated in approved organogram that are to be updated as and when changes occur.
- Site supervisor will be trained and instructed in the application of quality management principles on site and will be responsible for effective quality management for the areas under their control. This does not detract Supervisor from their responsibilities in terms of environmental, health, safety and other supervisory functions.

All personnel are in turn responsible and accountable for the implementation of quality management in areas under their control.

The contractor shall ensure that human resources are made available for product realisation. The resources shall include personnel with technical competence and quality assurance specialism.

### **7.1 Project Communication (Internal communication)**

The project manager has developed a communication plan to ensure that there is a clean line of communication within the project. The need for effective communication within the organisation, and the importance of meeting customer, statutory, and regulatory requirements is stressed throughout the quality documentation.

The quality assurance system defines how each personnel contribute towards the fulfilment of the quality policy. Ultimately, the responsibility for quality rests with all project management team members.

The competence of all personnel will be monitored through the management system. The organisational structure defines the relationships between the members of the project management team and shows how authority to control quality is delegated.

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## 7.2 Competence, Awareness, and Training

The project manager shall put significant emphasis on the competence of its personnel for effective quality control of the work. They shall monitor the competence of the personnel and shall develop plans to ensure that:

- a) The personnel and operatives employed in the execution and supervision of works must be adequately competent for the duties they perform.
- b) Training needs must be identified, and records are kept of training received and employee performance.
- c) All personnel, including new recruits, who affect quality, must have access to a (controlled) copy of the project quality plan, the quality manual, and the associated procedures so that the quality requirements are widely understood from the start of the employment.
- d) Quality forms part of the induction program to ensure that every new member or staff of the organisation know their requirements.

As part of a continuing education program, the project may use external courses and/or in-house training courses specific to site, including training in quality management systems, Health & Safety, Technical, Commercial, Human Resources, Finance and Environmental requirements. Other forms of empowerment like mentoring and coaching can be used.

## 8. Project Execution

### 8.1 Requirements Review

The project has established a procedure/process (team/squad checks) for contract review and for effective coordination of contract activities, including contractor and customer liaison (32-188).

The contract is reviewed to ensure that the requirements are adequately defined and documented, and that the management team has the capability to meet these contractual requirements with suitable resources. The contract is formally reviewed before and after contract award to ensure that the proposal and award requirements of the contract are identical, and, where they differ, differences are resolved. The review is carried out at tender and contract strategy, scope and works information definition, project execution, the contract hand-over and close-out meetings. Channels of communication and interfaces with the

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contractors are subsequently established. Items of discussion/review include schedule, progress, resources, changes, (manpower, materials, scope of work) risk and safety. These meetings will provide data for satisfaction monitoring. All reviews are recorded and maintained as part of the quality records.

## 8.2 Customer communication

Customers will be kept up to date with the progress of the project through formal meetings, communications, and any other documented form of communication.

## 8.3 Design Control

The **PLC Refurbishment** project management team have established and maintain procedures to ensure that designs are planned, controlled, and verified to conform to the specified requirements. The following procedures are available: **PLC Refurbishment** system engineering change management process for contract works information; and design review processes, concession acceptance process, etc.

The measures established in the procedure will ensure that:

- a) Design planning is carried out in a controlled manner by qualified personnel with adequate resources. A design plan or procedure will be reviewed and updated when necessary.
- b) Design interfaces are identified, (e.g., organisational, technical) the necessary information is documented, transmitted, and reviewed until accepted.
- c) Design input requirements are identified, documented and their selection reviewed for adequacy. Ambiguities, if any, shall be resolved by reviewing these against requirements.
- d) Design output is checked to ensure it meets the design input and reviewed before its release.
- e) Design changes and modifications shall be identified, documented, reviewed relative to original specification and/or product liability, and submitted to the project manager for approval where contractually required.
- f) Design verification is subject to independent verification and as defined by the contract documents.
- g) Design validation is achieved by successfully following the previous steps.

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#### 8.4 Purchasing

The purchasing procedure (32-188) shall be followed for all the purchases to ensure that:

- a) Products and services are provided by contractors and suppliers who can demonstrate their ability to supply products or services which conform to the specified purchase requirements (quality, schedule, and price).
- b) Selection of the contractors, suppliers and sub-contractors must be based on:
  - Their fulfilment of the requirements as specified in the contract quality requirements standard, and other requirements stated by NTCSA.
  - All contractors shall be pre-evaluated/pre-qualified in line with applicable procurement policies, processes, and procedures to establish their ability and suitability to supply the required products or services.
  - Inspection and assessment of contractors and suppliers, quality management systems, where appropriate.
  - Review of previous records, qualifications of personnel and performance to provide materials/services like those to be procured. Exceptions will be new contractors, suppliers, and specialists, when only one source is available /sole supplier.
  - Survey and evaluation of the contractors, suppliers, and sub-contractor's facilities to ensure quality is consistently achieved, and to assess whether the materials/services conform to the required standards of quality, on a specific contract. A reassessment may be necessary if survey and evaluation warrant such action.
- c) When purchase orders are issued to contractors and suppliers, they will incorporate:
  - Material/product specifications and relevant quality standards.
  - A requirement to identify environmentally hazardous materials and provide Material Safety Data Sheets.
- d) Purchase requisitions are reviewed (squad checks) and approved to ensure the adequacy of the specified purchase requirements prior to communication to the supplier.

The **PLC Refurbishment** will only use approved contractors / suppliers / who are registered in the NTCSA vendor list. If approval of a contractor, supplier or sub-contractor is required prior to placing an order, approval will be obtained by the procurement manager.

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### 8.5 Process Control (Work Environment)

The project manager shall, by a process of review and/or reporting, establish a work environment that promotes completion of the work according to the contract requirements or works information.

### 8.6 Process Control (Works Control)

The project has established and maintains a process to comply with the following objectives (QCP / Inspection process):

- a) Control works activities and deliver work that meets contract requirements.
- b) Define the manner of meeting the specification set, with reference to Standards and Codes of Practice (where applicable).
- c) Outline the work and administrative procedures and ensure that they are identified in the contract quality plan (CQP).
- d) Provide a means of monitoring and controlling the execution process, via an Inspection and Test Plan / QCP. Ensure that contractors observe the documented work procedures and method statements.
- e) Ensure the designers follow all the specifications and requirements stated in the contract.
- f) Keep records of supervision and the circumstances under which the work was accomplished and include the measures required to protect the permanent works (where applicable).
- g) Maintain records of special processes (e.g., welding, complex computer programs, use of ground anchors, etc) including equipment and personnel (with qualifications) as appropriate. The contract quality plan will identify any special processes and procedures to control this activity.

The contractor is responsible for executing the work in accordance with the plans and specifications or work information. Each contractor is also responsible for controlling the quality of their work to meet contract plans, specifications, and related requirements. The contractor's quality control is a systematic implementation of a program of inspections, tests, and production controls to attain the required standards of quality and to preclude problems resulting from non-compliances/defects. Pursuant to the contract quality requirements standard, each contractor will establish an independent quality control program and develop a

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contract quality plan (CQP) and the quality control plan (QCP or ITP). The QCP must provide for tests and inspections pursuant to various technical specifications. It will define procedures to ensure that activities affecting quality are properly documented and accomplished in accordance with contract documents, written instructions and industry standards, codes, and procedures. Furthermore, the CQP will define methods for ensuring that activities affecting quality will be accomplished under controlled conditions.

Independently of the contractors, the quality resource will provide quality assurance through daily monitoring and scheduled audits and inspections to verify the effectiveness of the contractor's quality control program and assure that the quality and contract requirements are met by the contractors. The quality resource assures that the contractor's quality control is working effectively, and that the resultant product or service complies with the quality requirements established by the contract.

### 8.7 Control of customer property

**The PLC Refurbishment** project management team shall exercise care with customer property while it is under its control or is being used by the team. The project management team shall identify, verify, store, and maintain customer property, provided for use or incorporation into the product (works). The process will ensure that:

- a) Incoming property is not used or processed until it has been inspected or otherwise verified as conforming to the specified requirements.
- b) Any property that is lost, damaged or otherwise unsuitable for use is recorded and reported to the customer and records maintained.
- c) Agreement is reached with the customer regarding the fitness of the supplied property for its purpose and incorporation into the product.

**Note:** Customer Property may include 'Intellectual' property e.g., Specification, Drawings, Computer Software, etc.

### 8.8 Product Identification and Traceability

**The PLC Refurbishment** project management team shall suitably identify products from applicable drawings, specification, or other documents during all stages of production, delivery, and installation, as required by the contract documents.

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Where, and to the extent that traceability is a specified requirement, individual products or batches shall be given unique identification. This identification will be recorded including their status and location in the works. These records will form part of the quality documentation.

## 8.9 Inspection and Testing

The inspection and testing process has been established and maintained to ensure that (QCP /Inspection Process):

- a) Acceptance of incoming products is achieved by signing the delivery note. Upon delivery, visual inspections will be made, and any damage / discrepancy will be noted on the delivery note. Where inspection is not possible (due to, say, bulk delivery), a note may be made on the delivery note stating 'not checked' etc.
- b) When a product is to be inspected and checked at the supplier's premises, the project management team shall specify the checking and compliance criteria to be fulfilled prior to product release, QCPs are signed by all parties if standards are met, and NCR/defects issued where standards are not met.
- c) Effective in-process checks, inspections, and tests must be put in place and identified in the contract quality plan. The contract quality plan shall identify the records to be kept and maintained to provide evidence that the product has passed these inspections and tests. Any non-conforming/defective product will be identified and as described in the control of non-conforming products procedure 240-44175038 and 240-180000564 Contractors and suppliers, quality documents must provide for the project management team's "hold / witness / verify, review, points" within the process (as appropriate).
- d) Where traceability of a product is required, records containing the unique identification, status and location of the product are maintained.
- e) Quality control plans prepared by the contractor shall allow for the project manager (or his/her representative) to insert their 'hold, witness, verify, review points'. "Hold" - No further activity to progress until cleared by signing off. (Verbal clearance may not be accepted, all work must be signed off and records must be retained by the project management team).
- f) Prior to handover by the contractor, all works is subjected to final inspection and tests in accordance with the quality control plan and records collated to provide evidence of

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conformance of the finished product to the specified requirements. A punch list (list of defects or non-conformances) must be produced by the project management team (in conjunction with the contractor) of items requiring remedial action. Completion of such listed work will be considered final satisfactory inspection. Punch-lists shall be signed off by the contractor or its representative, to confirm substantial completion of works.

- g) The records are formatted so that persons authorising the release / acceptance are identified.

### 8.10 Control of Inspection, Measuring and Test Equipment

In a case where the **PLC Refurbishment** project management team will keep inspection and test equipment, a process shall be established and maintained to ensure:

- a) All equipment used in the inspection, measurement and testing is maintained and calibrated. The equipment is to be used in a manner which ensures that its limits of accuracy are known and applied to ensure that the measurements taken are meaningful relative to tolerances specified, and in appropriate environmental conditions. At times, comparing results with other calibrated equipment may be satisfactory, provided that the calibration history of the reference instrument is recorded.
- b) All testing standards are approved to known and acceptable Standards.
- c) All measuring equipment having a bearing on quality will have a tag, sticker, or other marking, indicating its calibration status. Handling, presentation and storage of all measuring and test equipment will be such that fitness for use is maintained.
- d) Records of the results of the calibration tests of the measuring equipment are maintained and will include, details of equipment, type, frequency of checks, check method, acceptance criteria and actions taken when results are unsatisfactory, e.g., re-testing.
- e) Checksheets, profiles, and other equipment used in setting out are checked regularly and records of these checks maintained, where appropriate.
- f) If computer software is used for monitoring and measuring of specified requirements, then the ability of the software to satisfy the intended application shall be confirmed prior to initial use and, later, while in use.

In addition to all survey equipment, the requirement will apply to concrete batch plants, weigh stations, laboratory equipment, pressure gauges, etc. If these services are procured from

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external sources, they are subject to process for the control of contractors, suppliers, and inspection and test status.

The **PLC Refurbishment** quality management system ensures, via established process, that the inspection and test status of each part of the work is evident at all stages of works.

Inspection records generated on a contract show either compliance to the specification or non-compliance via non-conformance/defects reports, until resolved.

Items or parts of the works which do not conform to the specified requirements are identified by the means of a defect notification or non-conformance report depending on the nature of the non-conformance. All relevant personnel are copied. The defect notification or non-conformance report notifies them of the date, location, and the nature of the non-conformance. These items or parts of the works are only deemed acceptable to become part of the works when the defect or NCR has been satisfactorily resolved. Completion of a particular part of a project is achieved only when the appropriate records identify completion of work together with any inspections and proving tests which have been completed, giving acceptable records.

Where traceability is a requirement, the **PLC Refurbishment** project management team will control and record the unique identification and location in works to the extent specified in the contract documents. This will apply to non-conforming products released after satisfactory inspections/tests, as applicable.

### **8.11 Handling, Storage, Packaging, Preservation and Delivery**

If required, process will be established to provide:

- a) Define methods and means of handling how to prevent damage or deterioration.
- b) Secure storage area pending use or delivery, stock assessment at frequent intervals to detect deterioration, methods for authorizing receipts and dispatch from storage yards.
- c) Control on packing, preservation and marking processes to the extent necessary to ensure conformance to specified requirements.
- d) For the protection of the product after final inspection and test until handover to the customer. The protection shall include delivery to destination where specified.

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## 9. Measurement, Analysis of Data, and Improvement

### 9.1 General

The **PLC Refurbishment** project management team measures the performance of its processes by:

- a) Evaluating the work relative to specified and implied requirements.
- b) Assessing the capability of its processes.
- c) Comparing the achievement of project objectives against project expectations.
- d) Examining comments received from the customer and other interested parties.

Since most the works/installation projects are unique, it is not feasible to carry out statistical analysis. When there is a repetitive activity, statistical techniques could be developed to verify the acceptability of process capabilities and product characteristics in accordance with specified acceptance criteria, for that activity. Procedures would then be established for statistical analysis.

**Note:** The process of measurement, analysis and improvement is performed in full for all processes and is addressed via the applicable process as in the PLCM. The items covered include, for example, conformity of products, conformity to the quality management system, customer satisfaction, characteristics and trends of processes and products highlighting opportunities for preventive measures and improvement.

### 9.2 Monitoring and Measurement

The project manager and client liaison officer are responsible for establishing customer relations. This may involve direct contact with the customer on a periodic basis to determine levels of customer satisfaction. The quality resource will analyse customer complaints and identify corrective actions where required. Results of such analysis will be reported as necessary at management meetings.

### 9.3 Monitoring and Measurement of Processes

If required, the quality resource will identify the scope, type, and frequency of measurement of characteristics necessary to assess a process and, if necessary, will produce specific instructions for processes which affect performance. The quality resource will produce,

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monitor, and revise, at a suitable frequency, a non-exhaustive measurement and monitoring description for the processes. This will be referred to during internal audits.

#### 9.4 Monitoring and Measurement of Product

The **PLC Refurbishment** project management team will, as necessary, implement monitoring and measurement processes to ensure that: process for inspection of incoming goods to be developed.

- a) Incoming products are inspected at the time of delivery, taking due note of quality controls exercised at the source and quality documents provided with the incoming product(s). (Inspection check sheets to be completed during inspections). (This includes contracted out design related work as well as sub-contract work and bought-in supplies/products). When a product is required urgently to be released for production purposes, it shall be positively identified and recorded to permit immediate recall in case of non-conformance to specified requirements.
- b) Effective in-process checks, inspections and tests will be identified in the quality control plan.

The contract quality plan shall identify records to be established and maintained to provide evidence that the product has passed its inspections and tests. Any defect or non-conforming product will be identified and remedied as described in control of non-conforming product procedure. Contractors and suppliers, quality documents will comply with the **PLC Refurbishment** project quality plan.

Prior to completion, all construction is subjected to final inspection and tests in accordance with the project quality plan. Records will be gathered to provide evidence of conformance of the finished product to the specified requirements. Normally, a punch list is jointly produced of items needing some work. Completion of such listed work will be considered final satisfactory inspection. The customer's acceptance of the works will be considered as satisfactory delivery of the final product.

#### 9.5 Monitoring and Measurement of the Interested Parties

The project manager has appointed a client liaison officer who will collect whatever information is required to meet its needs and contract requirements. Measurements will be in the form of:

- a) Performance reviews.

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- b) Customer complaints and compliments.
- c) Community complaints, etc.

### 9.6 Control of Non-Conforming Product, Corrective and Preventative Action

The **PLC Refurbishment** project management team has established a non-conformance procedure 240-44175038 & 240-180000564 to identify and control any product which does not conform to specified requirements (and where possible to be segregated from the fabrication/construction activities to avoid inadvertent use). Non-conformance reports 240-180000650 shall be written by the persons responsible for the activity or by the quality resource and logged on the SAP QIM.

Non-conformances are recorded and reviewed for appropriate remedial action using non-conformance reports and remedial action sheets. Response is also required to avoid recurrence of the non-conformity. This will be verified before closure. Remedial actions taken are inspected and tested, as necessary, in accordance with specified requirements.

This could be achieved either through rework, concessions, scrap or return to the supplier.

In appropriate circumstances, the customer will be consulted to approve the remedy. Consent/approval will be documented.

Corrective action is taken in accordance with established procedures 240-53464409 to:

- a) Review and investigate the cause of non-conforming products or work by analysis of all relevant processes, work operations, concessions, quality records, audit observations, complaints and initiate corrective action to prevent recurrence.
- b) Initiate preventive actions to deal with problems including complaints to a level corresponding to the risks encountered.
- c) Apply controls to ensure that corrective actions are taken and are effective.
- d) Implement record and review changes resulting from corrective and preventative actions in the procedures, and for continually improvement of the quality management system.

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### 9.7 Analysis of Data

The quality resource is responsible for collating and analysing factual data from all relevant sources to demonstrate that the quality management system is effective. Sources can include internal quality audits, defects and non-conformance reports, contractor and supplier performance information, customer rejections and / or complaints,

process performance, Data base on adherence to schedule, site progress, and developer satisfaction monitoring. Any trends and characteristics of process and products will be considered for opportunities of improvement.

### 9.8 Continuous Improvement

The **PLC Refurbishment** project management team will adhere to continuous improvement of this quality management system via internal audits, review of NCRs and defects, process reviews, management reviews and any intervention deemed necessary.

## 10. Handover

The appointed quality resource will be required to monitor and maintain all quality documentation, reports, and records during the project life cycle. This should be maintained as per QM-58 requirements. A duplicate data book should be handed to the customer upon handover.

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## 11. Acceptance

This document has been seen and accepted by:

Name	Designation
Phuti Ratau	Senior Quality Advisor
Puleng Tsatsi	Quality Manager
Fako Pitsi	Project Manager

## 12. Revisions

Date	Rev.	Compiler	Remarks
November 2025	1	P Ratau	New Document

## 13. Acknowledgements

N/A

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