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Date: ……	Date: ……	Date: ……

Authorised by

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Group Manager Engineering

Date:……

CONTENTS

1. INTRODUCTION

This document will support the procurement and contracting phase for the provision of calibration service of test equipment required at Hendrina Power Station. The intent is to have a 5 year NEC3 Term Services contract in place to support this objective.

This document defines detail description of requirements which will form the core of the final services contract, between Eskom and the Contractor providing the calibration service for the test equipment detailed herein.

2. SUPPORTING CLAUSES

2.1 SCOPE.

This document collects all the information from related stakeholder requirements for the supply of calibration service of test equipment and forms the basis of the scope.

There shall be a predefined method provided in the contracting phase for newly acquired equipment to be added to the scope of work provided the equipment is of a similar type or functional purpose outlined in the scope.

2.1.1 Purpose

The purpose of this document is to provide a clear statement of the scope of work for the provision of calibration service of test equipment required at Hendrina Power Station.

This document shall apply to Eskom Hendrina Power Station

2.2 NORMATIVE/INFORMATIVE REFERENCES

2.2.1 Normative

N/A

2.2.2 Informative

N/A

2.3 DEFINITIONS

N/A

2.3.1 Disclosure Classification

Controlled disclosure: controlled disclosure to external parties (either enforced by law, or discretionary).

2.4 ABBREVIATIONS

Abbreviation	Description
C&I	Control & Instrumentation
IED	**Instrument Engineering Department**
IMN	**Instrument Maintenance North**
IMS	**Instrument Maintenance South**

Abbreviation	Description
PPD	**Plant Performance Department**
SANAS	**South African National Accreditation System**
SOW	Scope of Work

2.5 ROLES AND RESPONSIBILITIES

C&I Engineering at Hendrina Power Station is responsible for issuing spares SOW.

Materials Management will be responsible for managing the contract.

2.6 PROCESS FOR MONITORING

Not applicable

2.7 RELATED/SUPPORTING DOCUMENTS

Not applicable

3. SERVICE INFORMATION

3.1.1 Summary

The contract is for the provision of calibration of test equipment. The *Contractor* calibrates the test equipment to a standard which is traceable to National Standards. Hendrina Power Station has a number of equipment that they use in the plant to perform parameter checks on instruments to confirm or verify the inputs, outputs and also test functionality. The correctness of these equipment is very important, and this is achieved by calibrating them once a year or as per equipment requirements.

3.1.2 Description of the Service

- The *Contractor* calibrates test equipment to a standard which is traceable to National Standard
- The test equipment calibration period expires.
- The Contractor collects expired test equipment from site to place they will be calibrated.
- Contractor dispatch expired test equipment for calibration to a SANAS accredited Labatory for calibration
- Provide a SANAS calibration certificate with each item of equipment detailing:
    - The test points used.
    - Minimum of five per measuring range
    - Equally spread over the full range
    - The results obtained.
    - Test equipment used to carry out the calibration.
- Provide a fault report with each item that failed the calibration, detailing where the equipment failed the calibration.
- Verify and calibrating all equipment, replacing fuses where necessary.

- The company keeps records of the calibrated equipment for 2 years after the contract has ended.
- The Contractor shall give a one-year warranty on calibrated equipment, if there are any deviations, the Contractor is liable to correct the deviation / defect at no cost to Eskom.
- The Contractor obtain cost per repair and notify Service Manager.
- A complete written quotation must be submitted to the Service Manager who will, after approval of the quotation, issue a separate order for repair and re-calibration of the equipment.
- Calibration outstanding for 2 months, or more is to be expedited and a weekly progress report, detailing the reason for delay and expected completion date, are submitted to Service Manager
- Contractor delivers all completed calibration equipment to site after notification
- The Contractor shall only make use of approved test equipment for calibrations, and which is of higher accuracy than equipment to be calibrated.
- The Contractor shall be in a position to host Eskom employee/s for a site visit to confirm that the calibrating instrumentation is according to SANAS standards.
- The site visit will include but not limited to checking the calibration certificates for the calibrating instruments.
- Contractor submits invoice to APS for calibration or repair after payment certificate is accepted.
- Guaranteed period 30days after delivery to site,
- Equipment only to be picked up from site after an official order is received.
- List of equipment to be calibrated in next section 3.1.4

3.1.3 Tender Technical Evaluation Strategy

The tender Technical Evaluation Strategy is a separate document which outlines the requirements, roles, and responsibilities for Provision of calibration of C&I test equipment at Hendrina Power Station for 5 years. The services will be outsourced to a suitable supplier and managed through a NEC Terms Services Short Contract. The documents will be read in conjunction with each other.

3.1.4 List of test Equipment

The table below lists the Eskom Hendrina Test Equipment that require calibration **service**. Note, it shall also be required to add new items to this table below when new assets are purchased and acquired by end users.

Description
Acoustic Calibrator
Air Neutronics Manometer PDM 309
Autoranging Lightmeter
Beamax Pressure Calibrator
Beamax Temp Calibrator
Block Calibrator DB 700A
Bruel & Kjaer Sound Meter Type 2236
Budenberg Deadweight Tester
Budenberg Dial Gauges 200mm
Budenberg Dial Gauges 100mm
CPG 1200 Digital Pressure Gauge

CPG 1500 Digital Pressure Gauge
Crystal Digital Pressure Gauge
Drager X-am 8000
Druck Press Calibrator DPI610
Druck Press Calibrator DPI615
Druck Press Calibrator DPI620
Electronic OHM Ero
ETS Lindgren Microwave Meter
Flexim Portable Clamp-on Flow Meter
Fluke 177
Fluke 187
Fluke 52 Thermometer
Fluke 572-2 IR Thermometer
Fluke 725
Fluke 77
Fluke 773 Milliamp Process Clamp Meter
Fluke 87
Fluke 87 True RMS Multimeter
Fluke 871
Fluke 8840
Flus Infrared Handheld Thermometer
Function Generator
Gilibrator 2
Gillian Gil Sampler Meter
Goldilux Auto Ranging Light Meter
GW Power Supply
Handheld Thermometer Sentry Spot Gun
He, H2 Sniffing Machine Leybold Phoeni XL 300
Honeywell Pyrometers
IAQ CALC
Kestrel Heat Stress Tracker 5400
Kestrel Velocity Meter 1000
Major Tech Open Jaw K2300R 1000A AC/DC Clamp Meter
Megger
Memocal 2000
Memocal 81B
Micr RAE PGM 2602, M032-4111-200 Portable Gas Monitor
MRU Air Gas Detector 400GD
Multigas Ventis Pro 5

Oscilloscope
Oven Laboratory Supplies
Particle Generator
PF Sampler Iso Kinetic LC4
Philips Function Generator
Portable Multi-Gas Detector
Potacount
Quest QT34 Heat Stress Meter
Quest Sound Level Meter Model 1900
Quest Temp 34 Thermal Environmental Monitor
Quest Temp L89203 Heat Stress Monitor
Resistance Box
Scale Mettler PJ 6000
Sensidyne Gillian Gilibrator 2 Air Flow Meter
Shaker Analysette 3 Pulversette 0
Shaw Dew Point Meter
Sitrans F US Clamp on Thickness Gauge
SLM Quest Technologies
Svantek 104IS
Svantek 106 Vibration
Svantek 971
Svantek 973
Temperature and Humidity Tester
Testo 340 O2Tester
Torque Wrench
TSI IAQ CALC Indoor Air Quality Meter
Ultrasonic Thickness Gauge Time
Veloci Calc

4. AUTHORISATION

This document has been seen and accepted by:

5. REVISIONS

6. DEVELOPMENT TEAM

The following people were involved in the development of this document:

C&I Maintenance

7. ACKNOWLEDGEMENTS