





	<p style="text-align: center;"><b>Scope of Work</b></p>	<p style="text-align: center;"><b>Technology</b></p>
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<p>Title: <b>Service, Calibration, Repairs and supply of instrument and spare parts for Laboratory equipment and consumables at Kriel Power Station for a period of 5 years, on as and when required basis.</b></p>	<p>Unique Identifier: <b>559-1417553932</b></p> <p>Alternative Reference Number: <b>N/A</b></p> <p>Area of Applicability: <b>Engineering</b></p> <p>Documentation Type: <b>Scope of Work</b></p> <p>Revision: <b>1</b></p> <p>Total Pages: <b>8</b></p> <p>Next Review Date: <b>N/A</b></p> <p>Disclosure Classification: <b>CONTROLLED DISCLOSURE</b></p>
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Compiled by	Functional Responsibility	Authorised by
		
		
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## **1. INTRODUCTION**

Kriel Power Station Chemical Services uses Balances, Furnaces, Ovens, Mass pieces and other verification equipment for the analysing coal samples at Chemical Services.

These analyses are important for continuous process monitoring and to take timeous corrective action in terms of deviation in analyses from the specification.

The above-mentioned analyses are also governed by Coal Supply Agreement entered by Seriti Mine and Kriel Power station which require a set adherence to the analysis requirements.

Kriel Power Station Coal laboratories play a critical role in evaluating the quality, performance, and commercial value of coal used in industrial applications such as power generation, metallurgical processes, and fuel production. Accurate laboratory testing ensures that coal meets required standards for safety, efficiency, handling, and environmental compliance. To carry out these evaluations, specialized equipment is used to determine the physical, chemical, and thermal characteristics of coal. Each instrument is designed to perform precise measurements under controlled conditions, ensuring consistency and reliability in analytical results. Understanding the function and proper operation of coal laboratory equipment is essential for producing credible data that supports decision-making in mining, processing, and utilization.

## **2. SUPPORTING CLAUSES**

### **2.1 SCOPE**

This document provides the scope requirements for the Service, Calibration, Repairs and supply of instrument and spare parts for Laboratory equipment and consumables at Kriel Power Station for a period of 5 years, on as and when required basis.

#### **2.1.1 Purpose**

The purpose of this document is to detail the requirements for the Service, Calibration, Repairs and supply of instrument and spare parts for Laboratory equipment and consumables at Kriel Power Station for a period of 5 years, on as and when required basis.

To achieve the following

**Characterize Coal Quality** – Instruments such as moisture analysers, calorimeters, and ash furnaces determine key quality parameters that classify coal grades and suitability for specific applications.

**Ensure Compliance with Standards** – Laboratory equipment allows testing in accordance with ASTM, ISO, and other regulatory standards to ensure that coal meets national and international specifications.

**Support Process Optimization** – Analysis results guide improvements in mining, preparation, combustion, and beneficiation processes by identifying variations in coal composition and behaviours.

**Enhance Safety and Environmental Performance** – Proper testing equipment helps assess volatile matter, sulphur content, and other properties that influence emissions, handling hazards, and environmental impact.

**Provide Reliable Data for Commercial Transactions** – Accurate measurements of energy content, impurities, moisture, and other properties ensure fair pricing and contractual compliance between buyers and sellers.

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### 2.1.2 Applicability

This document shall apply to Kriel Power Station.

## 2.2 NORMATIVE/INFORMATIVE REFERENCES

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

### 2.2.1 Normative

[1] ISO 9001 Quality Management Systems

### 2.2.2 Informative

[2] Not applicable

## 2.3 DEFINITIONS

### 2.3.1 Disclosure Classification

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

## 2.4 ABBREVIATIONS

Abbreviation	Description
PS	Power Station
SOW	Scope of work

## 2.5 ROLES AND RESPONSIBILITIES

Roles and Responsibilities are as follows:

- The Senior Supervisor is responsible for compiling the SOW and circulating it to all the relevant stakeholders for review.
- Chemical Services Manager is responsible for reviewing the SOW to ensure that the consolidated scope will address plant challenges.
- The Contractor is responsible for executing the SOW.

## 2.6 PROCESS FOR MONITORING

The internal assurance will be done by the Senior Supervisor and the contracts manager.

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## **2.7 RELATED/SUPPORTING DOCUMENTS**

Not applicable.

## **3. SCOPE OF WORK**

### **3.1 BATTERY LIMITS**

The battery limits for this SOW are:

1. Service, Calibration and Repairs for Laboratory equipment at Kriel Power Station for a period of 5 years, on as and when required basis.
2. Supply of equipment, spare parts and consumables for Laboratory equipment's at Kriel Power Station for a period of 5 years, on as and when required basis.

### **3.2 TECHNICAL SPECIFICATIONS**

#### **3.2.1 Technical Requirements**

1. Service, Calibration and Repairs for Laboratory equipment by a SANAS accredited facility at Kriel Power Station for a period of 5 years, on as and when required basis and provide a calibration certificate.
2. Supply of equipment, spare parts and consumables for Laboratory equipment's at Kriel Power Station for a period of 5 years, on as and when required basis.

#### Quantity Requirements

Requirement	Quantity for 5 years	Frequency
Service and SANAS accredited calibration of Analytical balances in the laboratory at Kriel Power Station	200	Half yearly and as and when required
Service and SANAS accredited calibration of Top pan balances in the laboratory at Kriel Power Station	80	Half yearly and as and when required
Service and SANAS accredited calibration of ISO ASH furnace in the laboratory at Kriel Power Station	30	Half yearly and as and when required
Service and SANAS accredited calibration of ISO Volatile furnace in the laboratory at Kriel Power Station	40	Half yearly and as and when required
Service and SANAS accredited calibration of Oven at 1 point in the laboratory at Kriel Power Station	70	Half yearly and as and when required

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Service and SANAS accredited calibration of Oven at 2 points in the laboratory at Kriel Power Station	20	Half yearly and as and when required
Service and SANAS accredited calibration of water bath at 1 point in the laboratory at Kriel Power Station	20	Half yearly and as and when required
Service and SANAS accredited calibration of water bath at 2 points in the laboratory at Kriel Power Station	20	Half yearly and as and when required
Service and SANAS accredited calibration of hygrometer at 3 points for temperature and humidity in the laboratory at Kriel Power Station	20	Yearly and as and when required
Service and SANAS accredited calibration of cooking thermometer and probe at 3 points in the laboratory at Kriel Power Station	25	Yearly and as and when required
Service and SANAS accredited calibration of Digital thermometer and solid probe at 3 points in the laboratory at Kriel Power Station	35	Yearly and as and when required
Service and SANAS accredited calibration of Infrared gun at 3 points in the laboratory at Kriel Power Station	25	Yearly and as and when required
Service and SANAS accredited calibration of timer/Stopwatch in the laboratory at Kriel Power Station	30	Yearly and as and when required
Service and SANAS accredited calibration of mass pieces in the laboratory at Kriel Power Station	250	Yearly and as and when required
Service and SANAS accredited calibration of veneer calliper in the laboratory at Kriel Power Station	20	Yearly and as and when required
Repair labour hours for equipments for the laboratory at Kriel Power Station	3000	As and when required
Repair travel km for equipments for the laboratory at Kriel Power Station	5000	As and when required
Supply of Oven element	10	As and when required
Supply of Oven fan	10	As and when required
Supply of Digital display	70	As and when required
Supply of ASH Furnace element	5	As and when required
Supply of Vol Furnace element	5	As and when required
Supply of ASH furnace packing	5	As and when required

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Supply of Vol furnace packing	5	As and when required
Supply of ASH furnace wiring	5	As and when required
Supply of Vol furnace wiring	5	As and when required
Supply of ASH Furnace thermocouple	15	As and when required
Supply of Vol Furnace thermocouple	20	As and when required
Supply of 25kg mass pieces	5	As and when required
Supply of 10kg mass pieces	5	As and when required
Supply of 5kg mass pieces	5	As and when required
Supply of 1kg mass pieces	5	As and when required
Supply of 200 g mass pieces	5	As and when required
Supply of 100 g mass pieces	5	As and when required
Supply of 50 g mass pieces	5	As and when required
Supply of 20 g mass pieces	5	As and when required
Supply of 10 g mass pieces	5	As and when required
Supply of 5 g mass pieces	5	As and when required
Supply of 2 g mass pieces	5	As and when required
Supply of 1 g mass pieces	5	As and when required
Supply of 0.5 g mass pieces	5	As and when required
Supply of 0.2 g mass pieces	5	As and when required
Supply of 0.1 g mass pieces	5	As and when required
Supply of hygrometer	10	As and when required
Supply of cooking thermometer and probe	20	As and when required
Supply of digital thermometer and solid probe	20	As and when required
Supply of Infrared gun	5	As and when required
Supply of timer/Stopwatch	10	As and when required
Supply of 20cm digital veneer calliper	5	As and when required
Supply of 30cm digital veneer calliper	5	As and when required
Supply of SANAS Accredited certificates	500	As and when required
Provide health, safety, environment and quality file	5	Yearly
Supply LFD diesel test kit	600	As and when required
Supply of 1 Litre Hydranal Coulumat CG	300	As and when required
Supply of 1 Litre Hydranal Coulumat AG	300	As and when required

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Supply of 450mm sieve	60	As and when required
Supply of 450mm Receiver	10	As and when required
Supply of 450mm Lid	10	As and when required
Supply of 300mm sieve	20	As and when required
Supply of 300mm Receiver	10	As and when required
Supply of 300mm Lid	10	As and when required
Supply of 200mm sieve	70	As and when required
Supply of 200mm Receiver	10	As and when required
Supply of 200mm Lid	10	As and when required
Mega bags with top ad bottom spout (W900mmXD900mmXH100mm)	300	As and when required

#### 4. AUTHORISATION

This document has been seen and accepted by:

Name & Surname	Designation
[REDACTED]	Chemical services manager
[REDACTED]	Senior supervisor Chemistry
[REDACTED]	Senior Chemist
[REDACTED]	Technician Chemistry
[REDACTED]	Technician Chemistry

#### 5. REVISIONS

Date	Rev.	Compiler	Remarks
November 2025	1	[REDACTED]	Final Document

#### 6. DEVELOPMENT TEAM

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

- [REDACTED]

#### 7. ACKNOWLEDGEMENTS

Not applicable.

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