
	SCOPE OF WORK (SOW)	TURBO GEN SERVICES (TGS)
---	------------------------	-----------------------------

Title: TGS – Periodical Turbine and  
Auxiliary Oil Analysis

Unique Identifier: N/A  
Alternative Reference No.: N/A  
Area of Applicability: Eskom Rotek  
Industries (ERI) SOC Ltd.  
Document Type: Scope of Work (SOW)  
Revision: 0  
Total No. of Pages: 4  
Next Review Date: N/A  
Classification: **Controlled Disclosure**

Compiled by:



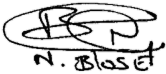
Lungisile Makaka

Date: 25/01/2026

Senior Condition Monitoring Technician

Functional Responsibility:

Approved by:



Nhlakanipho Blose Date:

Maintenance Services Manager

# Table of Contents

- 1 Objectives ..... 3
- 2 Scope of services ..... 3
- 3 General Requirements ..... 3
  - 3.1 Lead / Turn Around times ..... 3
  - 3.2 Where Services will be rendered ..... 3
- 4 Scope of Work (SOW) ..... 3
- 5 QUALITY REQUIREMENTS ..... 4
- 6 KEY DELIVERABLES ..... 4

# 1 Objectives

The objective of this document is to outline the services that are required from the Service Provider with regards to turbine and auxiliaries periodical oil analysis as per various plant preventative maintenance strategies. The scope to be executed as per the Eskom Standard for In-Service Monitoring of Lubricating and Hydraulic Oils (240-83797737) and meet all quality requirements during activities are met.

## 2 Scope of services

The scope of responsibility includes periodical oil analysis and RBOT (Oxidation stability) Analysis at the Service Providers Laboratory. **The scope of services will be rendered to ERI, as and when required, over a period of 5 years.**

## 3 General Requirements

### 3.1 Lead / Turn Around times

- The supplier must ensure quick turnaround time of 72 hours or even sooner, this includes laboratory testing and providing detailed report with clear explanations and specific recommendations for actions.
- The supplier must also be able to perform emergency oil analysis and results must be available within 24 hours or sooner, this includes laboratory testing and providing the reports

### 3.2 Where Services will be rendered

- The Eskom Power Station for the Services include Camden Power Station, Duvha Power Station, Hendrina Power Station, Kriel Power Station & Medupi Power Station.

## 4 Scope of Work (SOW)

Below are the tests which are associated with both periodical oil sampling and RBOT

- Wear metals
- Contaminants
- Additives and lubricant condition
- Viscosity at 40 C and 100 C, and Viscosity index
- Cleanliness rating
- Particle count test
- Total acid number
- Water test
- Oxidation and nitration test
- Foaming
- Total base number
- Oil filter analysis
- Analytical ferrography
- Demulsibility Test ASTM D1401
- Air release oil analysis

- Water by Karl Fisher
- PQ Index

## **5 QUALITY REQUIREMENTS**

All service providers are expected to comply with, but not limited to the following:

- Lab Certification Requirement: These ISO Standards must be adhered to - ISO4406 cleanliness method for measuring particle contamination levels, and ISO 17025 for competence in testing and calibration.
- Adherence to Quality Management System Policies, Procedures and related requirements of ISO 9001.
- Adherence to Occupational Health and Safety Policies, Procedures and related requirements of the OHSAS 18001.
- Adherence to environmental aspects, related impacts and legal requirements associated with work activities in accordance with ISO 14001.

## **6 KEY DELIVERABLES**

**The following deliverables are to be met by the service provider:**

- No customer complaints
- Compliance to all ERI Work Instructions, processes, procedures, and standards
- Turn Around times are to be achieved.