



Strategy

Engineering

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## **INTRODUCTION**

An invite will be issued calling for interested parties to participate in the tender process for the purification of oil in the turbine plant as scope of work KUS-20240532. The scope will include but not limited to the supply of purification equipment, supply of purification filters and management of oils. This document sets out the method and criteria that will be used to evaluate the tenders that will result from this pre-qualification invite.

## **1. SUPPORTING CLAUSES**

### **1.1 SCOPE**

This strategy defines the Technical Evaluation Team (TET), their responsibilities and the criteria to be used to evaluate the technical proposals received.

#### **1.1.1 Purpose**

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and TET member responsibilities for tender technical evaluation. The technical evaluation strategy serves as basis for the tender technical evaluation process.

### **1.2 NORMATIVE/INFORMATIVE REFERENCES**

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

#### **1.2.1 Normative**

- [1] 240-48929482: Tender Technical Evaluation Procedure
- [2] 240-48929482 Tender Technical Evaluation Procedure
- [3] 32-1034 Eskom Procurement Policy
- [4] 240-53716746 Tender Technical Evaluation Report Form Template
- [5] 240-53716712 Tender Technical Evaluation Results Form Template
- [6] 240-53716726 Tender Technical Evaluation Scoring Form Template
- [7] 240-105776552 Kusile Power Station Waste Management Work Instruction
- [8] ISO 9001 Quality Management Systems
- [9] 240-83797737 In-Service Monitoring of Lubricating Oils and Hydraulic Fluids
- [10] National Environmental Management Waste Act No 26 of 2014
- [11] National Environment Management Act No 14 of 2009
- [12] Occupational Health and Safety & Regulations Ac No 85 of 1993

### 1.2.2 Informative

[13] Kusile Outage Philosophy

[14] KUS-20240532 Kusile Power Station Lubrication and Purification Scope of Work

## 1.3 DEFINITIONS

### 1.3.1 Contractor:

Service provider contracted for supplying specific service to Eskom Power Station

### 1.3.2 Employer

Eskom, or Eskom Kusile Power Station

### 1.3.3 Total Fluid Management

Lubricants supply, equipment lubrication and management of oils and greases

### 1.3.4 Controlled Disclosure

Controlled Disclosure to external parties (either enforced by law, or discretionary)

### 1.3.5 Classification

**Controlled Disclosure:** Controlled Disclosure to external parties (either enforced by law, or discretionary).

## 1.4 ABBREVIATIONS

Abbreviation	Description
CV	Curriculum Vitae
SE	System Engineer
TES	Technical Evaluation Strategy
TET	Technical Evaluation Team
TFM	Total Fluid Management
BU	Business Unit
COC	Certificate of Compliance
KPA	Key Performance Area
KPI	Key Performance Indicator
MSDS	Material Safety Data Sheet
PCLF	Planned Capacity Loss Factor

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PM	Plant Management
PPE	Personal Protective Equipment
PS	Power Station
<b>Abbreviation</b>	<b>Description</b>
PSR	Plant Safety Regulations
PTW	Permit to Work
ISO 55000	International Standard for the Management of Physical Assets
QA	Quality Assurance
QC	Quality Control
QCP	Quality Control Plan
QMP	Quality Management Programme
SABS	South African Bureau of Standards
SANS	South African National Standards
SAP	Systems, Applications, Products (Plant Maintenance, Procurement, Finance and Materials Management) Integrated computer system
SHE	Safety, Health, Environment
SOW	Scope of Work
UCF	Unit Capability Factor
UCLF	Unplanned Capability Loss Factor
URS	User Requirement Specification

**1.5 ROLES AND RESPONSIBILITIES**

Compiler	The document compiler is responsible for ensuring that this document is up-to-date and that this document is not a duplication of an existing documentation, regarding the document's objectives and content.
Functional Responsibility	The Functional Responsible Person shall determine if the document is fit for purpose, before the document is submitted for authorisation.
Authoriser	The document authoriser is a duly delegated person with the responsibility to review the document for alignment to business strategy, policy, objectives and requirements. He/she shall authorise the release and application of the document.

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## 1.6 PROCESS FOR MONITORING

The primary process for monitoring will be governed by the Tender Technical Evaluation Procedure (24024892948).

## 1.7 RELATED/SUPPORTING DOCUMENTS

240-106871290 TET Appointment Letter

240-168966153 Generation Technical Tender Evaluation Procedure

Tender Technical Evaluation Report Template

Tender Technical Evaluation Results Form Template

Tender Technical Evaluation Scoring Form Template

Tender Technical Evaluation Strategy Template

## 2. TENDER TECHNICAL EVALUATION STRATEGY

### 2.1 TECHNICAL EVALUATION SCORING METHOD

The evaluation of tenders will be based on the tenderer's ability to meet the requirements specified the Scope of Work. A weighted score card approach will be used to evaluate the tenders against the Employer's requirements. The following scoring method will be used in general. It will be specified where other scoring methods is used.

**Table 1: Scoring Method**

<b>SCORE</b>	<b>PERCENTAGE</b>	<b>DESCRIPTION</b>
5	100	<b>COMPLIANT</b> <ul style="list-style-type: none"><li>• Meet technical requirement(s)/AND;</li><li>• No foreseen technical risk(s) in meeting technical requirements.</li></ul>
4	80	<b>COMPLIANT WITH ASSOCIATED QUALIFICATIONS</b> <ul style="list-style-type: none"><li>• Meet technical requirement(s) with;</li><li>• Acceptable technical risk(s) AND/OR; • Acceptable exceptions AND/OR;</li><li>• Acceptable conditions.</li></ul>
2	40	<b>NON-COMPLIANT</b> <ul style="list-style-type: none"><li>• Does not meet technical requirement(s) AND/OR; Unacceptable technical risk(s) AND/OR; • Unacceptable exceptions AND/OR;</li><li>• Unacceptable conditions.</li></ul>
0	0	<b>TOTALLY DEFICIENT OR NON-RESPONSIVE</b>

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The evaluation scores will be weighted as follows according to disciplines: **Table 2: Evaluation Scores**

<b>Technical (100%)</b>	
3.4.1 Completed projects and quality of reports	20%
3.4.2 Quality Control Plan	30%
3.4.3 Method statement	30%
3.4.4 Experience and maintenance/labour team	20%
<b>TOTAL (100%)</b>	
<b>Overall minimum threshold for qualification (70%)</b>	

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 70%.

Motivate, in detail, any deviation from the 70% threshold value, if applicable.

## 2.2 TET MEMBERS

**Table 3: TET Members**

<b>TET number</b>	<b>TET Member Name</b>	<b>Designation</b>
TET 1	Khazamula Xivuri	Turbine System Engineer
TET 2	Lehlogonolo Phogole	Turbine System Engineer
TET 3	Yingisani Chauke	Senior Supervisor Turbine
TET 4	Nonhlanhla Zikalala	Outage Coordinator
TET 5	Nondumiso Khumalo	Senior Advisor Outages
TET 6	Musa Ngwane	Senior Engineer
TET X		

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**2.3 MANADATORY TECHNICAL EVALUATION CRITERIA**

In order to be eligible for evaluation the tenderer shall meet the gatekeepers specified on the table below:

**Table 4: Mandatory Technical Evaluation Criteria**

	<b>Mandatory Technical Criteria Description</b>	<b>Reference to Technical Specification / Tender Returnable</b>	<b>Motivation for use of Criteria</b>
1.	Purifiers (machines) capable of meeting turbine standard of purification	Tender to submit Equipment datasheet with resultant oil properties or specification. (To be compare to Turbine OEM Specification HTGD 90 117 V0001 W – Lubrication and Control Oils for Gas and Steam Turbines)	To ensure service provided has no detrimental impact in the safe operation of Kusile Assets
2.	Experienced technicians to connect and operate the machines	Appropriate Curriculum Vitae	To ensure service is provided by a competent person
3.	Knowledge of the OHS Act	OHS Certificate	For compliance to OHS Act and safety while working at an Eskom site

**2.4 QUALITATIVE TECHNICAL EVALUATION CRITERIA**

**Table 5: Qualitative Technical Evaluation Criteria**

	<b>Qualitative Technical Criteria Description</b>	<b>Reference to Technical Specification / Tender Returnable</b>	<b>Criteria Weighting (%)</b>	<b>Criteria Sub Weighting (%)</b>
1.	References of completed projects and quality of reports		20	

	1.1	Proof of completed projects that entails maintaining oil quality to specifications (ISO4406 Class--/16/13, water content <200ppm), remove, purify, store and replace oil	Past orders and completed work reports		10
	1.2	Quality of work reporting structure/templates	Structure of reports/templates		5
	1.3	Years of working experience	Record of years/work experience		5
2.	Quality Control Plan			30	
	2.1	QCP for oil purification	QCP template		15
	2.2	QCP for Oil sampling or removal and oil replacement	QCP template		5
	2.3	QCP for Oil storage or waste management	QCP template		5
	2.4	Include signature matrix make provision for the following people in your matrix, outage coordinator, Eskom QC, Contractors supervisor, etc.	QCP template		5
3.	Provide method statement detailing purification of oil including, storage, handling up to the commissioning of oil system (RTS)			30	
	3.1	Detailed method statement for executing oil purification of major installations	Methodology document		20
	3.2	Detailed procedure of handling oil in bulk	Procedure		10
4.	Proof of experience and maintenance/labour team			20	

	4.1	Team complement (X Supervisors, X Tribologists, x Technicians (mechanical),x Technicians (Electrical), X Artisans x Operators)	CV's of workforce and proof of experience		10
	4.2	Full technical Specification of purifying equipment/machinery	Equipment Technical Specification		10
				<b>TOTAL: 100</b>	

## 2.5 SCORING CRATERIA

**Table 6: Qualitative Technical Evaluation Criteria Scoring**

	Qualitative Technical Criteria Description		Reference to Technical Specification / Tender Returnable	Scoring Criteria
1.	References of completed projects and quality of reports			
	1.1	Proof of completed projects that entails maintaining oil quality to specifications (ISO4406 Class--/16/13, water content <200ppm), remove, purify, store and replace oil	Past orders and completed work reports	5 = work reports include oil removal, oil replacement, oil storage and oil purification (to specification) 4 = work reports include oil removal, oil replacement and oil storage or oil purification (to specification) 2 = work reports includes either oil removal and oil replacement or oil storage or oil purification 0 = No submission

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	1.2	Quality of work reporting structure/templates	Structure of reports/templates	5 = Structure of reports includes as minimum, System Lubricant consumption report, plant defect report, monthly plant health status report, quality report, investigation report.  4 = Structure of reports includes as minimum, System Lubricant consumption report, plant
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				defect report, monthly plant health status report, quality report. 2 = Structure of reports submitted 0 = No Submission
	1.3	Years of total fluid management experience	Record of years/work experience	5 = > 5 years' experience 4 = 3 to 5 years' experience 2 = 1 to 2 years' experience 0 = No submission or 0 experience
2.	Quality Control Plan			
	2.1	QCP for oil purification	QCP template	5 = QCP fully signed and includes the purification volume, cleanliness acceptance criteria, contractor and customer intervention points 4 = QCP includes the purification volume, cleanliness acceptance criteria, contractor and customer intervention points 2 = QCP includes contractor and customer intervention points 0 = No submission

	2.2	QCP for Oil sampling or removal and oil replacement	QCP template	<p>5 = QCP fully signed and includes the house keeping activities, PSR and Environment activites, contractor and customer intervention points</p> <p>4 = QCP includes the house keeping activities, PSR or Environment activities, contractor and customer intervention points</p> <p>2 = QCP includes contractor and customer intervention points 0 = No submission</p>
	2.3	QCP for Oil storage or waste management	QCP template	<p>5 = QCP fully signed and includes the house keeping activities, PSR or Environment</p>
				<p>activites, contractor and customer intervention points</p> <p>4 = QCP includes the house keeping activities, PSR or Environment activities, contractor and customer intervention points</p> <p>2 = QCP includes contractor and customer intervention points 0 = No submission</p>
	2.4	Include signature matrix make provision for the following people in your matrix, outage coordinator, Eskom QC, Contractors supervisor, etc.	QCP template	<p>5 = signature matrix make provision for outage coordinator, Eskom QC, Contractor's supervisor</p> <p>4 = signature matrix make provision for any two between outage coordinator, Eskom QC, Contractor's supervisor</p> <p>2 = signature matrix make provision for anyone between outage coordinator, Eskom QC, Contractor's supervisor</p> <p>0 = No Signature matrix</p>

3.	Provide method statement detailing purification of oil including, storage, handling up to the commissioning of oil system (RTS)			
	3.1	Detailed method statement for executing oil purification of major installations	Methodology document	<p>5 = Method statement includes required personnel, safety and environmental requirements, plant decommissioning, oil purification activities and plant commissioning</p> <p>4 = Method statement includes required personnel, safety and environmental requirements, oil purification activities.</p> <p>2 = Detailed method statement submitted.</p> <p>0 = No submission</p>
	3.2	Detailed procedure of handling oil in bulk	Procedure	<p>5 = Detailed procedure includes as a minimum storage site requirement, all required equipment for bulk oil handling, legal quantities to store, housekeeping, safety and Environmental requirements</p>
				<p>4 = Detailed includes storage site requirement, all required equipment for bulk oil handling, legal quantities to store and housekeeping.</p> <p>2 = Detailed procedure is submitted</p> <p>0 = No submission</p>
4.	Proof of experience and maintenance/labour team			

4.1	<p>Team complement</p> <ul style="list-style-type: none"> <li>a. Supervisors</li> <li>b. Tribologists</li> <li>c. Mechanical Technicians</li> <li>d. Electrical Technicians</li> <li>e. Artisans</li> <li>f. Operators</li> </ul>	<p>CV's of workforce and proof of experience</p> <p><b>Qualifications Required:</b></p> <p><b>Supervisor:</b> N.Dip in Mechanical/Electrical Engineering</p> <p><b>Electrical Technicians:</b> N6 with Trade/N.Dip in Electrical Engineering</p> <p><b>Mechanical Technicians:</b> N6 with trade/N.Dip in Mechanical Engineering</p> <p><b>Tribologist:</b> N6/N.Dip any Engineering Qualification and a Level 3 Machinery Lubrication Analyst certificate</p> <p><b>Artisans:</b> N3 Engineering with Trade</p> <p><b>Operators:</b> Grade 12</p>	<p>5 = CV's Include 6 or more of the discipline categories.</p> <p>4 = CV's Include 4 or more of the 6 discipline categories.</p> <p>2 = CV's Include 2 or more of the 6 discipline categories. 0 = No response</p>
4.2	<p>Full technical Specification of purifying equipment/machinery</p>	<p>Equipment Technical Specification</p>	<p>5 = The detailed technical specification from OEM submitted, Equipment able to purify oil of more than 12000 litres and particles size up to 3 microns</p> <p>4 = The detailed technical specification submitted, Equipment able to purify oil of more than 12000 litres and particles size up to 3 microns</p> <p>2 = The detailed technical specification submitted</p> <p>0 = No Submission</p>

**2.6 TET MEMBER RESPONSIBILITIES**

**Table 7: TET Member Responsibilities**

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6	TET n
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1	X		X	X		X	
2	X	X	X		X	x	
3	X	X			x		
<b>Qualitative Criteria Number</b>	<b>TET 1</b>	<b>TET 2</b>	<b>TET 3</b>	<b>TET 4</b>	<b>TET 5</b>	<b>TET 6</b>	<b>TET n</b>
1.1	X	X			X	X	
1,2	X	X	X			X	
1.3		X	X	X			
2.1	X	X	X	X	X		
2.2			X	X	X	X	
2.3				X	X	X	
2.4		X			X	X	
3.1	X	X	X			X	
3.2	X	X	X	X			
4.1	X		X	X	X		
4.2	X			X	X	X	

## 2.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

### 2.7.1 Risks

**Table 8: Acceptable Technical Risks**

Risk	Description
1.	None

**Table 9: Unacceptable Technical Risks**

Risk	Description
1.	None

### 2.7.2 Exceptions / Conditions

**Table 10: Acceptable Technical Exceptions / Conditions**

Risk	Description
1.	None


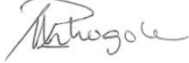





**Table 11: Unacceptable Technical Exceptions / Conditions**

Risk	Description
1.	None

## Tender Technical Evaluation Strategy: Lubrication for the Turbine Plant

### 3. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Khazamula Xivuri	Turbine System Engineer	
Lehlogonolo Phogole	Turbine System Engineer	
Yingisani Chauke	Senior Supervisor Turbine	
Nonhlanhla Zikalala	Outage Coordinator	
Nondumiso Khumalo	Senior Advisor Outages	
Ntsiki Hlapisi	Manager Execution Outage	
Trishka Munilal	Turbine Engineering Manager	
Grace Olukune	Engineering Group Manager	

### 4. REVISIONS

Date	Rev.	Compiler	Remarks
September 2024	01	Khazamula Xivuri	First issue

### 5. DEVELOPMENT TEAM

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

- Khazamula Xivuri
- Nonhlanhla Zikalala
- Lehlogonolo Phogole

### 6. ACKNOWLEDGEMENTS

- N/A

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