



Strategy

Engineering

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1. INTRODUCTION

This document is aimed at setting the standard technical evaluation criteria to be used when evaluating the tender submissions for the Tender Technical Evaluation Strategy for Matla Outside Plant 5 Year Gearbox Refurbishment Contract SOW to be executed. The project mostly entails the refurbishment of Matla Gearboxes (Coal Plant, Slurry and Water Treatment Plant). Furthermore, the work to be performed shall ensure that the Gearbox are able to perform efficiently and as per their design.

2. SUPPORTING CLAUSES

2.1 SCOPE

This document covers the technical evaluation process and criteria for the required Gearbox Refurbishment Work.

2.1.1 Purpose

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

2.1.2 Applicability

This document applies to Matla 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.

List the references under the following paragraphs, without indicating the date.

2.2.1 Normative

- [1] 32-1034 – Eskom procurement and supply chain management
- [2] 240-48929482: Tender Technical Evaluation Procedure
- [3] 240-53716712: Tender Technical Evaluation Results Form Template
- [4] 240-53716726: Tender Technical Evaluation Scoring Form Template

2.2.2 Informative

N/A

2.3 DEFINITIONS

2.3.1 Classification

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

2.4 ABBREVIATIONS

Abbreviation	Description
OEM	Original Equipment Manufacture
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

Roles and responsibilities are as per 240-48929482: Tender Technical Evaluation Procedure.

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION THRESHOLD

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

3.2 TET MEMBERS

The technical evaluation team will be composed of a minimum of two members to be appointed by the delegated authority.

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1		
TET 2		

3.3 MANDATORY TECHNICAL EVALUATION CRITERIA

Gatekeepers identified in the tender document will be a “must meet” criteria identified in the tabular questionnaire form. Contractor (s) tender will be assessed based upon questionnaire seeking YES or No response from the Contractor(s) with no point scores or weighed average assigned to the response.

Response of No against any criteria will be elimination of the Contractor(s) tender for further consideration or short listing for detailed technical evaluation. Gatekeepers will be minimum criterion elements with most significant and critical parameters applicable to the successful execution of the RFP Table 2 list the mandatory gatekeeper questionnaires identified for the subject RFQ. The Contractor is required to obtain at least 75% of the below Mandatory items in order to proceed to the Qualitative Technical Evaluation Stage.

Table 2: Mandatory Technical Evaluation Criteria

No.	Mandatory Technical Criteria Description	Reference to Technical Specification / Tender Returnable	Motivation for use of Criteria
1.	Gearbox Refurbishment Workshop and capabilities with 3 Ton Crane	<ul style="list-style-type: none"> Proof of Ownership/ 5 Year Lease agreement of Gearbox Refurbishment Workshop and Proof of capabilities and Crane (Minimum 3 Ton Capability). 	The Workshop is required to Refurbish the Gearbox and handle heavy Gearboxes
2.	Quality Standard	<ul style="list-style-type: none"> Company ISO 9001-2015 Quality Certificate 	The Gearbox Refurbishing Contract must adhere to the quality standard when refurbishing the gearbox.
3.	Gearbox Test Bench	<ul style="list-style-type: none"> Gearbox Test Bench that have the capability to test 150 Kw Powered Gearboxes. 	Required for Testing of the Gearboxes upon Refurbishment.

		<ul style="list-style-type: none"> • Test Bench must be equipped with a Torque Transducer to measure the torque transmitted through the gearbox • Must be equipped with temperature measuring system to monitor the temperature of the Gearbox Casing and the Lubricant. • Must be equipped with vibration monitoring sensors to monitor the operational vibrations of the gearbox. • Must have a load application function to simulate real world conditions. • Gearbox test bench must comply with relevant international standards, such as AGMA Standards with Reference to ISO. • Must be able to record the Test parameters and generate a report based on the Test results. • Recordings of thermography. 	
4	SANS ISO 3834 Certified	Company SANS ISO 3834 Accreditation Certificate.	Welding must be performed to SANS ISO 3834 standard.

Table 3: Qualitative Technical Evaluation Criteria

	Section	KPI- Criteria Evaluation Indicator	Minimum Criteria Evaluation Requirements	Source	Qualitative Evaluation Scoring			
					0%	40%	80%	100%
		Company Profile Document/Individual Profile	Company Experiences: (25%)	Sources	0	2	4	5
100%	Technical Requirements	Company's traceable evidence of previous Gearbox (Helical/ Worm/ Spur / Double helical, Herringbone / Spiral bevel / Epicyclic) Refurbishment	The list of traceable completion certificates of previous Gearbox (Helical/ Worm/ Spur / Double helical, Herringbone / Spiral bevel / Epicyclic) Refurbishment Work with references.	Company to provide evidence of previous Gearbox (Helical / Worm / Spur / Double helical, Herringbone / Spiral bevel / Epicyclic) Refurbishment	Submission meets either of the below: * No information submitted or less than 2 years, * Less than 10 Gearbox (Helical/ Worm/ Spur / Double helical,	Submission meets all the below: * 2 - 4 Previous years or 10-20 Gearbox (Helical/ Worm/ Spur / Double helical, Herringbone / Spiral bevel /	Submission meets all the below: * 5-7 Previous years or 21-30 Gearbox (Helical/ Worm/ Spur / Double helical, Herringbone /	Submission meets all the below: * 8 Plus Previous years or 31 Plus Gearbox (Helical/ Worm/ Spur / Double helical, Herringbone /

		work in the form of Completion Certificates.		Work completed in the form of completion certificates.	Herringbone / Spiral bevel / Epicyclic) Refurbishment Work experience. = 0%	Epicyclic) Refurbishment Work done. * Signed completion certificates. = 40%	Spiral bevel / Epicyclic) Refurbishment Work done. * Signed completion certificates. = 80%	Spiral bevel / Epicyclic) Refurbishment Work done. * And signed completion certificates = 100%
		Resources	Supervisor (10%)	Sources				
		Responsible Supervisor	Supervisor with the following: * Minimum Mechanical Engineering Diploma Qualification. Qualification must be certified within 3 months of Tender closing date. * Minimum 3 Years Work Experience in a Gearbox (Helical/Worm) Refurbishment.	Submit CV and Qualifications (minimum Mechanical Engineering Diploma) of supervisor with minimum experience of 3 Years related to Gearbox Refurbishment (Helical/ Worm) work.	Submission meets either of the below: * No information submitted. * Less than 3 Years experience in Gearbox Refurbishment (Helical/ Worm) work. * Incomplete documentations. * No National Diploma Qualification submitted. * Qualifications not certified within 3 months of	Submission meets all the below requirements: * CV for a supervisor with 4 – 5 Years experience in Gearbox Refurbishment (Helical/ Worm) work * National Diploma Certified within 3 Months of Tender Closing Date = 40%.	Submission meets all the below requirements: * CV for a supervisor with 6 – 7 Years experience in Gearbox Refurbishment (Helical/ Worm) work and * National Diploma Certified within 3 Months of Tender Closing Date = 80%.	Submission meets all the below requirements: * Submitted CV for a supervisor with 8 Plus Years experience in Gearbox Refurbishment (Helical/ Worm) work * National Diploma Certified within 3 Months of Tender Closing Date = 100%.

					Tender closing date = 0%			
		Resources	Gearbox Refurbishment Technician (15%)	Sources				
		3 x Responsible Gearbox Refurbishment Technicians	<p>3 x Mechanical Gearbox Technicians with the following:</p> <ul style="list-style-type: none"> * Minimum 3 Years experience in Gearbox Refurbishment (Helical/Worm). * Minimum N6 Mechanical related Qualification. * Trade Test. 	<ul style="list-style-type: none"> * Submit CV for 4 mechanical fitters with 5 years minimum experience in Gearbox Refurbishment (Helical / Worm) work, * And minimum Mechanical Engineering related N6 qualification * And trade test certificate. * Qualification to be certified within 3 months of Tender closing date. 	<p>Submission meets either of the below:</p> <ul style="list-style-type: none"> * No information submitted or incomplete documentations, * Less than 2 years experience in Gearbox Refurbishment (Helical / Worm) * No trade certificate or minimum N6 Mechanical Engineering qualification submitted, * Qualification not certified within 3 months of Tender 	<p>Submission meets all the below:</p> <ul style="list-style-type: none"> * CV for a Gearbox Refurbishment Technician with 3-4 years Gearbox Refurbishment (Helical / Worm) experience. * Trade test certificate. * Minimum N6 Mechanical Engineering related. * Qualifications certified within 3 months of Tender closing date. = 40% 	<p>Submission meets all the below:</p> <ul style="list-style-type: none"> * CV for a Gearbox Refurbishment Technician with 5-6 years Gearbox Refurbishment (Helical / Worm) experience. * Trade test certificate. * Minimum N6 Mechanical Engineering related. * Qualifications certified within 3 months of 	<p>Submission meets all the below:</p> <ul style="list-style-type: none"> * CV for a Gearbox Refurbishment Technician with 7 Plus years Gearbox Refurbishment (Helical/Worm) experience, * Trade test certificate. * Minimum N6 Mechanical Engineering related. * Qualifications certified within 3 months of Tender closing date. = 100%.

					closing date = 0%.		Tender closing date. = 80%	
		Resources	NDT Technician (5%)	Sources				
		Responsible NDT Technician	NDT Technician with the following: <ul style="list-style-type: none"> Non-Destructive Testing (MPI, UT, Dye Penetrant) Qualification Certificate and must be certified within 3 months of Tender closing date. CV showing at least 5 years' experience in performing 	Submit the CV's outlining the NDT Technician's qualification (NDT) and with minimum 2 years' experience in performing NDT.	Submission meets either of the below: <ul style="list-style-type: none"> * No information submitted. * Incomplete documentation or experience less than 2 years in conducting NDT's (MPI, UT, Dye Penetrant). * No certified qualification Certificate submitted. * Qualification certificate not 	Submission meets all the below: <ul style="list-style-type: none"> * Submitted NDT (MPI, UT, Dye Penetrant) Technician's CV outlining 3-4 years experience in conducting NDT's. * NDT Technician qualification certificate certified within 3 months of Tender Closing date = 40% 	Submission meets all the below: <ul style="list-style-type: none"> * Submitted NDT (MPI, UT, Dye Penetrant) Technician's CV outlining 5-6 years experience in conducting NDT's. * NDT Technician qualification certificate certified within 3 months of Tender Closing date. = 80% 	Submission meets all the below: <ul style="list-style-type: none"> * Submitted NDT (MPI, UT, Dye Penetrant) Technician's CV outlining 7 Plus years experience in conducting NDT's. * NDT Technician qualification certificate certified within 3 months of Tender

			Non Destructive Testing activities on components.		certified within 3 months of Tender closing date = 0%.			Closing date. = 100%.
			Quality Controller (5%)	Sources				
		Quality Controller	Quality Controller personal with the following: <ul style="list-style-type: none"> 5 Year experience in performing Quality Control duties on Refurbished or Manufactured Gearboxes. Minimum N6 Related 	Submit the CV's outlining experience in performing Quality Control duties on Refurbished Gearboxes. Submit Supporting Listed Qualification Documents.	Submission meets either of the below: * No information submitted. * No QC Gearbox Refurbishment experience. * Missing the required experience or documents. = 0%	Submission meets all the below: * CV showing 1-2 Years experience in performing Quality Control duties on Refurbished Gearboxes. * Submitted required listed Quality Controller qualifications which was	Submission meets all the below: * CV showing 3-4 Years experience in performing Quality Control duties on Refurbished Gearboxes. * Submitted required listed Quality Controller qualifications which was	Submission meets all the below: * CV showing 5 Plus Years experience in performing Quality Control duties on Refurbished Gearboxes. * Submitted required listed Quality Controller qualifications which was

			<p>Mechanical Qualification and Trade Test Certificate</p> <p>Or National Diploma in Mechanical/Industrial Engineering (or related Engineering Qualification)</p> <ul style="list-style-type: none"> • Any one of the below Quality Control/Quality Assurance Certifications : - ISO 90001:2015 Internal Auditor. - Six Sigma (Green Belt or Higher). - Certified Quality Inspector (CQI) by ASQ. 			certified within 3 months of Tender closing date. = 40%	certified within 3 months of Tender closing date. = 80%	certified within 3 months of Tender closing date. = 100%
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			<ul style="list-style-type: none"> Qualifications Certified within 3 Months of Tender Closing Date 					
			Execution Methodology (30%)					
		Method Statement	A detailed technical methodology on Refurbishing Industrial Gearboxes (Helical/Worm).	Submit the work specific detailed technical methodology for Refurbishing Industrial Gearboxes (Helical/Worm) <ol style="list-style-type: none"> Pre work equipment inspection – 10% Pre work Gearbox Inspections – 20% Gearbox Refurbishment work - 45%. Testing - 15%. 	Method Statement Total Score 0 – 50%.	Method Statement Total Score 51 – 69%.	Method Statement Total Score 70 – 89%.	Method Statement Total Score 90 – 100%.

				5. Submit previous Gearbox Refurbishment work data pack with verifiable client contact details – 10%				
		QCP	Quality Control Plan (5%)					
		Quality control plan documents	A detailed Quality Control Plan.	Submit job specific Gearbox Refurbishment QCP. 1. Pre work inspections (15%) 2. Gearbox Refurbishment Activities (60%)	Quality Control Plan Total Score 0 – 49%.	Quality Control Plan Total Score 50 – 69%.	Quality Control Plan Total Score 70 – 79%.	Quality Control Plan Total Score 80 – 100%.

				3. Testin g (25%)				
			5-Axis CNC Machinery (2.5%)					
		Machinery Ownership (5-Axis CNC Machinery)	Proof of Machinery Ownership (5-Axis CNC Machinery) and supporting documents and valid calibration certificate.	Submit Proof of Ownership of a 5 Axis CNC Machinery, supporting photos and valid calibration certificate.	Submission meets either of the below: * No Proof of Ownership of a 5 Axis CNC Machinery submitted. * No supporting photos Machinery and valid calibration certificates submitted.			Submission meets all the below: * CNC Machinery Proof of ownership. * Supporting Machinery photos/docum ents. * Valid calibration certificate.
			Machinery (Splines Cutting Machine up to 4m shaft length) (2.5%)					

		Machinery (Spline Cutting Machine up to 4m shaft length).	Proof of Machinery (Spline Cutting Machine capable of machining up to 4m shaft length).	<ul style="list-style-type: none"> * Submit Proof of Ownership of Machinery (Spline Cutting Machine capable of machining up to 4m shaft length), * Submit Supporting Machinery photos * Submit Valid calibration certificate. 	<p>Submission meets either of the below:</p> <ul style="list-style-type: none"> * No Machinery (Spline Cutting Machine capable of machining up to 4m shaft length) Proof of ownership submitted. * No supporting Machinery photos/documents submitted * No valid calibration certificate. 			<p>Submission meets all the below:</p> <ul style="list-style-type: none"> * Submitted Machinery (Spline Cutting Machine capable of machining up to 4m shaft length) Proof of ownership, * Submitted supporting Machinery photos/documents. * Valid calibration certificate.
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4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation

5. REVISIONS

Date	Rev.	Compiler	Remarks