

	Strategy	Engineering
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1. INTRODUCTION

The purpose of this document is to outline the scope of work that is required to conduct DHP repairs during outages.

2. SUPPORTING CLAUSES

2.1 SCOPE

Dust Handling Plant repairs during opportunity maintenance and various outages as and when required for the period of 5 years:

There will be an outage scope of work that will be handed over prior to outage which will **determine the exact work to be completed per outage, this is based on inspection.**

The scope of work comprises of the following:

Transfer Conveyors

- Replace flight/chain.
- Replace tension units.
- Top up gearbox oil.
- Replace defective fluid drive coupling.
- Replace high speed coupling bushes.
- Repack drive shaft and return idler shaft glands with suitable gland packing.
- Replace damaged expansion joints.
- Tension chain.
- Repack all easy opening door seals with felt material making sure that a dust tight seal is achieved
- Replace under tension detection arm and bearings.
- Refurbish/Replace all defective slide gates.
- Tighten all the hold-down bolts.

Hopper Conveyors

- Inspect all casings for leaks and repair/replace casings, wear rails, bottom plates, sprockets, and tension units if necessary.
- Inspect and refurbish all bottom plates if required.
- Replace flight/chain.
- Repack the drive shaft and return idler shaft glands with suitable gland packing.

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- Refurbish/Replace all defective slide gates on the DHP together with its ancillary equipment (lubricator bottles, pipework, solenoids, etc).
- Make sure that the slide gate-plate is moving freely and is sealing.
- Replace all defective expansion joints.
- Inspect and replace drive and end stations if necessary.
- Repair all casing supports / structures.
- Repair all casings where necessary (Patchwork where the structure is corroding).
- Repack all easy-opening door seals with felt material.
- Open, clean, and replace bearings (Tail and drive).
- Replace all defective flap valves.
- Replace under tension detection arm and bearings.
- Ensure hoppers are blocked off during and after casing washing/repairs to prevent foreign materials from entering the casings.

Over Bunker

- Open top inspection cover plates and doors.
- Repair all leaks, replace chains, wear rails, bottom plates & expansion joints.
- Top up gearbox oil.
- Refurbish/Replace all defective slide gates.
- Replace all defective expansion joints.
- Clean and inspect the slide gate lubricator and all air pipework and refill the lubricator with suitable oil if required.
- Make sure that the slide gate-plate is moving freely and is sealing.
- Open, clean, and replace all bearings (Tail and drive)
- Inspect and replace sprockets if worn beyond 2.5mm.
- Replace under tension detection arm and bearings.
- Repack all easy-opening door seals with felt material.

A & B Bucket Elevators

- Thoroughly inspect the condition of the belt on both streams
- Open inspection covers. Remove all old buckets from the belt. Remove the bottom/tension pulley. Remove old belt by utilizing ten-ton winch. Replace dove tails and traction pads on top / drive pulley.
- Refurbish the bottom pulley.
- Replace top slats.
- Repair leaks on both the ash conveying side and on the vacuum plant.

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- Inspect clean and replace if needed bucket inlet and outlet grizzlies. Repair any damage to outlet chute. Replace belt. Splice bucket belt by making use of supplied mechanical splice plate. The contractor only to assist Eskom personnel with this activity.
- Reassemble bottom pulley bearings (repack with high temperature grease) and make sure that air and grease pipes are attached to the bearing assembly.
- BOTH BUCKET ELEVATORS WILL BE SERVICED, BELTS WILL BE REPLACED BASED ON CONDITION AND RUNNING TIME.
- Inspect and replace/repair deflector plate.

2.1.1 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.

2.1.2 Applicability

This document shall apply to Lethabo 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] 240-48929482 Tender Technical Evaluation Procedure

2.2.2 Informative

Not Applicable

2.3 DEFINITIONS

Definition	Description
Tender	A tender refers to a written competitive offer, quotation, proposal made by the supplier in a prescribed or stipulated form in response to an invitation to tender/competitive enquire for provision of assets/goods or services and or the disposal thereof.

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2.3.1 Classification

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

2.4 ABBREVIATIONS

Abbreviation	Description
DHP	Dust Handling Plant
JPC	Japanese Pipe Conveyor
OEM	Original Equipment Manufacturer
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure

2.6 PROCESS FOR MONITORING

Not Applicable

2.7 RELATED/SUPPORTING DOCUMENTS

Not Applicable

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3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION THRESHOLD

The minimum weighted final score (threshold) required for a tender to be considered from a technical perspective is 80%.

3.2 TET MEMBERS


Table 1: TET Members

TET number	TET Member Name	Designation
TET 1		
TET 2		
TET 3		
TET 4		
TET 5		
TET 6		

3.3 CRITERIA

3.3.1 Mandatory Technical Evaluation Criteria

Table 2: Mandatory Technical Evaluation Criteria

	Technical evaluation for the refurbishment of the DHP at Lethabo power station		
Section A - MANDATORY REQUIREMENTS	OBJECTIVE EVIDENCE TO BE PRODUCED	Criterion achieved. Yes/No	COMMENT / REMARK
The service provider must demonstrate that the company is ISO 9001 accredited.	The service provider must show certification of ISO 9001 accreditation.		Applicable to all service providers
The service provider must demonstrate that the company is ISO 3834-part 2 accredited.	The service provider must show certification of ISO 3834-part 2 accreditation.		Applicable to all service providers

3.3.2 Qualitative Technical Evaluation Criteria for Part 1

Table 3: Qualitative Technical Evaluation Criteria for Part 1

Section B - QUALITATIVE CRITERIA								
KPI - Criteria Evaluation Indicator	Weight (%)	Minimum Criteria Evaluation Requirements	Unit	0 Non-Responsive 0% 2 Non-Compliant 4% 4 Compliant with associated qualifications 8% 5 Compliant 10%				TOTAL RATING
3.3.2.1 Fire watcher	10	The service provider to submit proof of a fire watcher with certification. Grade 10 or equivalent. 4 fire watchers provided – 5. 3 fire watchers provided – 4. 2 fire watchers provided – 2. No proof - 0	Number	0	2	4	5	
3.3.2.2 Safety Officer	10	Safety Officer with National Diploma in Safety Management, Incident Investigation/Rcat & HIRA plus registration with SACPCMP(Must). Proof of registration and 3 years' experience – 5 Proof of registration and 2 years' experience - 4 Proof of registration and 1 year experience - 2 No proof provided - 0	Number	0	2	4	5	
3.3.2.3 Supervisor		Mechanical Supervisor with National Diploma or equivalent in mechanical engineering. Qualified supervisor in bulk materials handling	Number	0	2	4	5	

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	10	<p>plant for 3 years - 5</p> <p>Qualified supervisor in bulk materials handling plant for 2 years - 4</p> <p>Qualified supervisor in bulk materials handling plant for 1 year - 2</p> <p>Less than 1 year experience and/or no qualification - 0</p>						
3.3.2.4 Site Manager	10	<p>Diploma in Engineering or higher. Certificate must be submitted. Curriculum Vitae to be submitted.</p> <p>Experience as a site manager for 3 years - 5</p> <p>Experience as a site manager for 2 years - 4</p> <p>Experience as a site manager at for 1 years – 2</p> <p>Less than 1 year experience and/or no qualification - 0</p>	Number	0	2	4	5	
3.3.2.5 Qualified Mechanical Fitters	10	<p>Qualified Mechanical Fitter/Artisan with N3 or equivalent and Trade test Certificate (Red seal). Minimum 3-year Post Qualification Mechanical work experience.</p> <p>8 mechanical fitters provided – 5.</p> <p>6 mechanical fitters provided – 4.</p> <p>Less than 6 mechanical fitters – 0</p>	Number	0	2	4	5	

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3.3.2.6 Qualified Welder	10	<p>Qualified Welder with N3 or equivalent and Trade test Certificate (Red seal). Minimum 3-year Post Qualification Welding work experience.</p> <p>4 welders provided – 5.</p> <p>3 welders provided – 4.</p> <p>Less than 3 welders - 0</p>	Number	0	2	4	5	
3.3.2.7 Qualified Boilermaker	10	<p>Qualified Boiler maker with N3 or equivalent and Trade test Certificate (Red seal). Minimum 3-year Post Qualification Boilermaker work experience.</p> <p>2 boilermakers provided – 5.</p> <p>1 boilermaker provided – 4.</p> <p>No boilermaker provided - 0</p>	Number	0	2	4	5	
3.3.2.8 Quality	10	<p>QC qualification with Trade test (Red seal) in Mechanical engineering, ISO 9001 awareness training.</p> <p>QC with required qualification and 3 years' experience – 5.</p> <p>QC with qualification and 2 years' experience – 4.</p> <p>QC with qualification and 1 years' experience – 2.</p> <p>No proof - 0</p>	Number	0	2	4	5	
3.3.2.9 Experience	10	<p>Supply references of work done on the same type of plant (for the similar scope of work), references from previous clients (minimum three separate referees)</p> <p>The evidence shall have the following documents:</p> <ol style="list-style-type: none"> 1. List of contract numbers/orders (with the contract value) for previous projects with traceable references. Completion of contracts/orders must be shown 	Number	0	2	4	5	

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		<p>2. Contact numbers of previous clients must be supplied with contracts (verification to be done).</p> <p>Provided 3 references – 5.</p> <p>Provided 2 references – 4</p> <p>Provided 1 reference – 2</p> <p>No references - 0</p>						
3.3.2.10 Semi -skilled	10	<p>Provide proof of semi-skilled workers with grade 10 or equivalent.</p> <p>15 semi-skilled provided – 5.</p> <p>12 semiskilled provided – 4.</p> <p>10 semiskilled provided – 2.</p> <p>Less than 10 semiskilled - 0</p>	Number	0	2	4	5	

TET Member Responsibilities for Part 1

Table 4: TET Member Responsibilities for Part 1

Mandatory Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6
	X	X	X	X	X	X
	X	X	X	X	X	X
Qualitative Criteria Number	TET 1	TET 2	TET 3	TET 4	TET 5	TET 6
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X
	X	X	X	X	X	X

3.4 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.4.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1.	Inadequate or less than required number of core team.

Table 6: Unacceptable Technical Risks

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Risk	Description
1.	Unavailable proof of personnel qualification

3.4.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions


Risk	Description
1.	None

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
1.	None

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
Johan Brink	OPE Manager	

5. REVISIONS

Date	Rev.	Compiler	Remarks

6. DEVELOPMENT TEAM

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

- See section 4 above

7. ACKNOWLEDGEMENTS

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