Eskom	Strategy	Engineering

Title: **Tender Technical Evaluation Strategy – The splicing, repair of damaged conveyor belts and the re-lagging of pulleys at Tutuka Power Station, on an "as and when required basis"**

Unique Identifier:	**15ENG GEN-135**
Alternative Reference Number:	**N/A**
Area of Applicability:	**Engineering & Maintenance**
Documentation Type:	**Strategy**
Revision:	**3**
Total Pages:	**18**
Next Review Date:	**As required.**
Disclosure Classification:	**CONTROLLED DISCLOSURE**

Compiled by	Functional Responsibility	Authorised by
Tom. E. Xaba	**Rhulani Lowani**	**Thabelo Mamphogoro**
Snr Advisor – Aux. Eng. Coal	**Line Manager – Inside Coal Plant**	**Senior System Engineer**
Date: 2021/07/14	Date: 15/07/21	Date: 2021/08/06
Egard Janse Van Rensburg	**Prince Nkanyane**	**Monyane Mokoena**
Snr Technologist –Aux Eng	**Line Manager - Ash Plant**	**Auxiliary Eng. Manager**
Date: 14/07/2021	Date:	Date: 2021/07/14
Hanerike Koekomoer	**Hlengiwe Dlamini**	**Ntombifuthi Ngcobo**
System Engineer – Aux Eng	**Coal Supply Manager**	**Engineering Manager**
Date: 13/07/2021	Date:	Date: 06/08/2021

CONTENTS

TABLES

1. INTRODUCTION

This Tender Technical Evaluation Strategy entails the technical specification and methodology on how the tenders in relation to the conveyor belts maintenance contract services will be evaluated for the supply and delivery of conveyor belts splicing services, maintenance repairs of damaged conveyor belts and re-lagging of Pulleys Services at Tutuka Power Station.

2. SUPPORTING CLAUSES

2.1 SCOPE

The scope in this Tender Technical Evaluation Strategy will be for all conveyor belts and all pulleys on the Power Station. The scope entails all maintenance work in relation to the conveyor belts and the associated conveyor belts pulleys as per contractual obligation between the services supplier (contractor) and the client (Eskom-Tutuka Power Station). Any other services herein not covered is not catered by this scope and if needs be such arising services will have to be subjected to negotiations and agreed between the affected parties and thereby reduced into written and authenticated agreement.

2.1.1 Purpose

The purpose of this tender technical evaluation strategy is to define the Mandatory Evaluation Criteria, Qualitative Evaluation Criteria and TET (Technical Evaluation Team) 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 Tutuka Power Station and will remain the sole document of the afore-mentioned power station. The applicability of this document in the afore-mentioned plant area is limited to Maintenance and Engineering only, unless authorized by the BU manager for extension to other departments within the 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] 240–120532564· Splicing and Repairs of the Steel Cord - and Plied Textile Reinforced Conveyor Belting.

[3] 240-55864509: Ceramic Lagging For Pulleys Standard

[4] 240-120532564- PVC belt splicing/ Finger splice-SANS 486 2009.

[5] ISO 1120 – Conveyor belts- Determinations of strengths of mechanical fastenings- Static test method.

2.2.2 Informative

[6] 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
COE	Centre of Excellence
PEIC	Production Enterprise Integration - Coal
QCP	Quality Control Plan
TET	Technical Evaluation Team

2.5 ROLES AND RESPONSIBILITIES

As per 240-48929482: Tender Technical Evaluation Procedure.

2.6 PROCESS FOR MONITORING

N/A

2.7 RELATED/SUPPORTING DOCUMENTS

2.7.1. 240–120532564: Splicing and Repairs of the Steel Cord - and Plied Textile Reinforced Conveyor Belting.

2 7 2. 240-55864509: Ceramic Lagging For Pulleys Standard

2.7 3. 240-120532564- PVC belt splicing/Finger splice-SANS 486 2009.

2.7.4. ISO 1120 – Conveyor belts- Determinations of strengths of mechanical fastenings- Static test method

3. TENDER TECHNICAL EVALUATION STRATEGY

3.1 TECHNICAL EVALUATION METHOD

A weighted score-card approach is used to evaluate the technical compliance of the tenders against the specifications. Tenderers need to have a weighted score of 70% overall or more to technically qualify for further evaluation.

The technical criteria and weighting is broken down as follows:

a) Technical: 100%

The evaluation of the tender submission will be based on the tenderer's ability to meet the technical requirements. A weighted score card approach will be used to evaluate the tender submission against the specifications and Employer's requirements.

The scoring method will be as follows:

SCORE	PERCENTAGE	DESCRIPTION
5	100	**COMPLIANT** • Meet technical requirement(s) AND; • No foreseen technical risk(s) in meeting technical requirements.
4	80	**COMPLIANT WITH ASSOCIATED QUALIFICATIONS** • Meet technical requirement(s) with; • Acceptable technical risk(s) AND/OR; • Acceptable exceptions AND/OR; • Acceptable conditions
2	40	**NON-COMPLIANT** • Does not meet technical requirement(s) AND/OR; Unacceptable technical risk(s) AND/OR; • Unacceptable exceptions AND/OR; • Unacceptable conditions
0	0	**TOTALLY DEFICIENT OR NON-RESPONSIVE**

The evaluation scores will be weighted as follows according to disciplines:

Splicing and Lagging (100%)	
Experience	50%
Qualifications	30%
Tools and equipment	10%
Quality Control	10%
TOTAL (100%)	
Overall minimum threshold for qualification (70%)	

3.2 TECHNICAL EVALUATION THRESHOLD

The threshold on the technical evaluation criteria is 70 %. Suppliers would be deemed technically unacceptable, if they score less and will thus not be evaluated further.

3.3 TET MEMBERS

Technical evaluation will be done by the member listed on table below:

Table 1: TET Members

TET number	TET Member Name	Designation
TET 1	P. Nkanyane	Operating Support Manager- Ash
TET 2	H. Dlamini	Coal Supply Manager
TET 3	R. Lowani	O/PLT Mech Manager
TET 4	T. Xaba	Senior Advisor – Auxiliary Eng.
TET 5	E. jv. Rensburg	Senior Technologist – Auxiliary Eng
TET 6	H Koekemoer	System Engineer – Auxiliary Eng.
TET 7	T. Mamphogoro	Senior Engineer – Auxiliary Eng.

3.4 MANDATORY TECHNICAL EVALUATION CRITERIA

Table 2: Mandatory Technical Evaluation Criteria

Item	Mandatory Technical Criteria Description	Reference to Technical Specification/ Tender Returnable	Motivation for use of Criteria
1	➢ A steel cord full belt width pull-out test accredited certificate from CMA, done during the last three years. (Attached pull-out accredited certificate)	Refer to Splicing and repairs of steel cord and plied textile-reinforced conveyor belting standard, page 29, section 4.11.1. Standard: 240-120532564.	To ensure that contractor can perform reliable belt splices.

3.5 QUALITATIVE TECHNICAL EVALUATION CRITERIA

Table 3: Qualitative Technical Evaluation Criteria

	Qualitative Technical Criteria Description	Reference to Technical Specification/ Tender Returnable	Criteria Weighting (W) (%)		Criteria Sub Weighting (SW) (%)
1	**Experience**		**50**		
	1.1 • Specialized splicing on steel cord and Plied Textile reinforced conveyor belts. • Specialized mechanical clip splicing on Plied Textile reinforced conveyor belts. • Specialized finger splicing on PVC conveyor belts.	Specification: 240-120532564 Returnable: • Submit verifiable list of references where such repairs were executed successfully. • Submit method statement that complies to appendix G and H of Eskom procedure 240-120532564 • Verifiable references or completed splices, with details including: ➢ Name of project ➢ Client name ➢ Date of project ➢ Contact person Refer to: • Splicing procedure (Ply belt) – Unique Identifier 240- 120532564 • Splicing procedure (Steel cord) – Unique Identifier: 240-120532564 • Splicing procedure (Finger splice)- Unique Identifier: SANS 486: 2009 • ISO 1120 – Conveyor belts- Determinations of strengths of mechanical fastenings- Static test method Splicing procedure (clip joint)	80 – 100 splices	5	40
			40 – 79 splices	4	
			10 – 39 splices	2	
			0 – 9 splices	0	

	1.2	Specialized maintenance repairs on damaged conveyor belts	Specification: 240-120532564 Returnable: • Submit verifiable list of references where such repair was executed successfully. • Submit method statement that complies to appendix G and H of Eskom procedure 240-120532564 • Verifiable references or completed belt repairs, with details including: ➢ Name of project ➢ Client name ➢ Date of project ➢ Contact person Refer to: • Splicing procedure (Ply belt) – Unique Identifier 240- 120532564 • Splicing procedure (Steel cord) – Unique Identifier: 240-120532564 • Rubber and ceramic pulley laggings: 240-55864509 • Splicing procedure (Finger splice)- Unique Identifier: SANS 486: 2009/240-120532564 • ISO 1120 – Conveyor belts- Determinations of strengths of mechanical fastenings- Static test method. Splicing procedure (clip joint)	50 – 60 belt repairs	5	30
				30 – 49 belt repairs	4	
				10 – 29 Belt repairs	2	
				0 – 9 belt repairs	0	
	1.3	Specialized lagging and re-lagging of conveyor belt pulleys on both rubber and ceramic methodology	Specification: 240-55864509 Returnable: • Verifiable reference list for maintenance repairs on pulleys with rubber and with ceramic lagging. • Submit method statement that complies with Appendix A of Eskom procedure 240-5864509 • Verifiable references or completed pulley laggings, with details including:	25 – 30 laggings	5	30
				15 – 24 laggings	4	
				1 – 14 laggings	2	

			➢ Name of project ➢ Client name ➢ Date of project ➢ Contact person Refer to: • Lagging procedure (Rubber) – Unique Identifier . 240-55864509 • Lagging procedure (Ceramic) – Unique Identifier: 240-55864509	0 laggings	0	
2	**Qualifications**			**30**		
		Qualifications on contract management, related technical experience and supervisory skills on the maintenance of conveyor belts and pulley lagging as required.	Specification: N/A Returnable: • Supply CV's and Qualifications of key personnel: ➢ Contract Manager ➢ Supervisor for supervision ➢ Splicing team for splicing ➢ Lagging team to do lagging Refer to: • Lagging procedure (Rubber) – Unique Identifier: 240- 55864509 • Lagging procedure (Ceramic) – Unique Identifier: 240- 558 • 64509 • Splicing procedure (Ply belt) – Unique Identifier 240- 120532564 • Splicing procedure (Steel cord) – Unique Identifier: 240- 120532564 • Splicing procedure (Finger splice)- Unique Identifier: SANS 486: 2009/240-120532564 • ISO 1120 – Conveyor belts- Determinations of strengths of mechanical fastenings- Static test method			

	2.1	Contract Manager Qualifications on contract management, related technical experience and supervisory skills on the maintenance of conveyor belts and pulley lagging as required.	Specification: 240-120532564 Returnable: • Supply CV's and Qualifications of key personnel (national diploma and a competency certificate of splicing and lagging)	National diploma and a competency certificate	5	10
				Only a national diploma or competency certificate.	2	
				No national diploma and a competency certificate.	0	
	2.2	Supervisor for supervision Qualifications on contract management, related technical experience and supervisory skills on the maintenance of conveyor belts and pulley lagging as required.	Specification: NIA Returnable: • Supply CV's and Qualifications of key personnel (competency certificate of splicing and lagging and HIRA certificates)	Competency certificate and HIRA certificate	5	30
				Only competency certificate or HIRA certificate	2	
				No Competency certificate and HIRA certificate	0	

	2.3	Splicing team for splicing Qualifications on contract management, related technical experience and supervisory skills on the maintenance of conveyor belts and pulley lagging as required.	Specification: N/A Returnable: • Supply CV's and Qualifications of key personnel: ➢ Assistant Splicers – Grade 12 with 3 years splicing and lagging experience.	Assistant Splicers – grade 12 with 3 years splicing and lagging experience	5	30
				Assistant Splicers – grade 12 with 2 years splicing and lagging experience	4	
				Assistant Splicers – grade 12 with 1 year splicing and lagging experience	2	
				No Assistant Splicers – grade 12 with 1 or 2 or 3 years splicing and lagging experience	0	

	2.4	Lagging team to do lagging Qualifications on contract management, related technical experience and supervisory skills on the maintenance of conveyor belts and pulley lagging as required.	Specification: N/A Returnable: • Supply CV's and Qualifications of key personnel. ➢ Lagging team – grade 12 with 3 years splicing and lagging experience.	Lagging team – grade 12 with 3 years splicing and lagging experience	5	30
				Lagging team – grade 12 with 2 years splicing and lagging experience	4	
				Lagging team – grade 12 with 1 year splicing and lagging experience	2	
				No Lagging team – grade 12 with 1 or 2 or 3 years splicing and lagging experience	0	

3	**Tools and Equipment**			**10**		
	3.1	The equipment or tool list shall be included in the tender. These tools need to be on site for the total duration of the specific works the contractor would be called for.	Specification: N/A Returnable: • Tool list. To be supplied as per 240-20532564 APPENDIX C: TOOLS. List to include: ➢ Press for all belt widths ➢ Generator ➢ Polisher ➢ Miscellaneous tools (Stanley knifes, etc)	Tool list includes all 4 items.	5	50
				Tool list includes all items except 1 of the listed items	4	
				Tool list includes all items except two of the listed items.	2	
				No tool list supplied	0	
	3.2	Calibration certificates of the Rubber Hardness Meter and Humidity Meter	Returnable: • Calibration certificates Refer to: • Splicing procedure (Ply belt) – Unique Identifier 240- 120532564 • Splicing procedure (Steel cord) – Unique Identifier: 240-120532564	Supplied both calibrations certificates	5	50
				Supplied any one of the two calibration certificates	2	
				No calibration certificates supplied	0	

4	**Quality Control**			**10**		
	4.1	Previously used examples of steel cord, ply belt & PVC belt splice QCP's.	Returnable: • Examples QCP's for steelcord. Ply and PVC belt splices Refer to: • Splicing procedure (Ply belt) – Unique Identifier 240- 120532564 • Splicing procedure (Steel cord) – Unique Identifier: 240-120532564 • Splicing procedure (Finger splice)- Unique Identifier: SANS 486 : 2009	QCP's for ply, steel cord and PVC belts	5	100
				QCP's for steel cord and ply conveyor belt splicing	4	
				QCP for PVC belt splicing only	2	
				No QCP supplied	0	
			Total:	**100**		

TECHNICAL SCORING QUALIFYING THRESHOLD FOR FURTHER EVALUATION = 70%

TET MEMBER RESPONSIBILITIES

Table 4: TET Member Responsibilities

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

3.7 FORESEEN ACCEPTABLE / UNACCEPTABLE QUALIFICATIONS

3.3.4 Foreseen Acceptable/Unacceptable Qualifications

The Tender Technical Evaluation Strategy shall clearly define all foreseen acceptable and unacceptable risk(s), exceptions and conditions associated with tender compliance to technical requirements.

These are defined to allow for clear differentiation between criteria scoring (refer to Table 2: Qualitative Evaluation Criteria Scoring Table) and to minimise ambiguities in scoring.

3.7.1 Risks

Table 5: Acceptable Technical Risks

Risk	Description
1.	**Suspension of the PTW on emergencies to fill up the bunkers.**

Table 6: Unacceptable Technical Risks

Risk	Description
2.	**Poor planning and workmanship that will require elongated time over and above the time granted and authorized as per the submitted plan.**

3.7.2 Exceptions / Conditions

Table 7: Acceptable Technical Exceptions / Conditions

Risk	Description
3.	

N/A: exceptions will be addressed as they arise.

Table 8: Unacceptable Technical Exceptions / Conditions

Risk	Description
4.	

N/A: exceptions will be addressed as they arise.

4. AUTHORISATION

This document has been seen and accepted by:

Name	Designation	Signature
T. Xaba	Senior Advisor	
H. Koekemoer	System Engineer	
E. jv Rensburg	Senior Technologist	
T. Mamphogoro	Senior Engineer	
M. Mokoena	Auxiliary Engineering Manager	

5. REVISIONS

Date	Rev.	Compiler	Remarks
29 May 2019	2	E jv Rensburg	Rev 1. Previous Tenderers did not achieve the 70% pass mark.
23 June 2021	3	E jv Rensburg	Rev 2. Previous Tenderers did not pass the SDL.

6. DEVELOPMENT TEAM

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

- Thomas Xaba
- Egard Janse van Rensburg
- Hanerike Koekemoer
- Thabelo Mamphogoro

7. ACKNOWLEDGEMENTS

N/A